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The Unification of Reading in the Intermediate Grades*

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AN ABRUPT TRANSITION from unification to diversification occurs in school programs between the primary and intermediate levels. This abrupt transition is reflected in pupils whose development is frustrated during the middle years of childhood. Reading, it is believed, can be organized to reduce this undesirable condition.

Intermediate pupils come to their own but their own receive them not. Continued infancy in these juveniles is deplored, and attempts to adopt behavior patterns of adolescents are ridiculed. Gradual substitution of adolescent and adult patterns for the patterns of infancy is demanded, and the bewildered child stands between two periods both of which are forbidden to him.

In this situation the child reacts as best he can. He does not live as abundantly and significantly as he wishes to live. The best that is in him is not challenged by the programs of his school, home, and community. Much of his energy is mis-spent in compensatory fantasy and activity. In the absence of opportunity for significant activity—a frequent condition

—numerous children become listless until, by plan or by chance, their renaissance occurs. Numerous others—the docile or “good”—upset their own future by submitting to the inevitability of adult wisdom as a guide to living. The child at this level is ready for realities built upon or developed from his earlier and fairly satisfactory life, but he is unready for the unrealities of adult impositions with their abstractions and remoteness from his status.

Intermediate children discover themselves in relation to a decidedly antagonistic and apparently inconsequential world. Their reactions vary. Many are too dull to rebel; some rebel unsuccessfully and then listlessly submit; some rebel and succeed well enough to have a spirited interlude with their elders or else with their inferiors in prowess; some accept adult plans as necessary routine, but “live” in activities that seem significant to themselves; and a few, by their own power or by fortunate adult planning, are able to live developmentally and, therefore, significantly. For the majority, pre-adolescence seems to be either a period of latency or a period of fairly unprofitable rebellion. For this majority, the

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world is maladjusted, while the world views the majority as maladjusted. The problem is, therefore, that of adjusting the world to these children.

Transition from a level that is prompted primarily by curiosity and eagerness for amusement to a level that is prompted by a deep and learned desire for achievement should occur during the years of school life. The curiosity and eagerness of very young children are easily satisfied and of short duration. The sustained effort of effective adulthood is on a mental level that is different from the infantile curiosity. If the child naturally develops gradually and not saltatorily, then the demands made by the school program should also increase gradually. Apparently, the transition is now too abrupt. The eagerness of young children seems to disappear in the intermediate grades. Of course, conditions other than those of the school may lead to this change in children's attitudes: the change may inhere in child nature, or it may inhere in any situation that requires abandonment of infantile curiosity as a primary motive. Likewise, children's change of attitude toward the school may result from any program that fails to recognize the naturally slow and gradual development of the power of sustained effort.

Our question is this: What has the reading program to do with this situation? Let us begin our reply to this question by recalling the conventional intermediate reading program. Conventionally, reading itself consists of reading as drill and also as literature. To this, there is added the reading of unrelated passages in arithmetic, geography, history, health, and much miscellaneous material that is read both at school and at home. Greater diffusion of effort could hardly be devised for pupils of this period. In the primary grades, however, activities are relatively undifferentiated.

By the time children reach the intermediate grades, their reading ability is developed sufficiently to enable them to read in many fields. When extended to many areas for which no activity or realistic background exists, this miscellaneous program of reading leads toward verbalism and superficiality.

The conventional reading program in the intermediate grades often exceeds the child's ability to adjust himself, not only because reading materials are uncorrelated among themselves, but also because they are unco-ordinated with the child's natural plan of development. The child at this stage has many interests, and his experience includes many situations that have left valuable impressions which he desires to capitalize. Both his interests and his experiences are violated by any program that fails to build upon them. Even worse, understanding of the world, his semantic development, is frustrated, because he is plunged into situations for which his interests and experiences have not yet prepared him. His new reading materials present numerous abstractions for which he has inadequate psychological antecedents.

One day's reading experiences of an intermediate pupil may aid our own analysis of this problem. Nine types of reading activities were recalled by this pupil. The school literature of the day was the story of Tom Brown's football game. This was reinforced by a brief and apparently helpful drill on phonics and a spelling lesson, the following words having been selected from the literature lesson: *scrummage*, *chastise*, *adversaries*, *charger*, *vendor*, *carcass*, *conscious*, and *triumphant*. History included a fascinating account of Roman life, and geography a few pages about North America, both history and geography being supported by map study and the filling in of workbook outlines. Arithmetic, in which the quantity of reading was inconsequential,

consisted of pints and pounds integrated with long division. The health lesson informed the pupil about water. Art carried the class back to the time of dinosaurs, the accounts of which supplied ideas to guide in the creation of murals. Home reading included a passage from *Lorna Doone* and the daily comic strips. Finally, home spelling sprang from the decoding of Orphan Annie jargon. Although each of these experiences had points of interest, and although the teachers were unusually capable, the day's reading was on a parity with the day's newspapers as far as unification was concerned. The reading materials were uncorrelated, and, as far as the pupil's account of the experiences goes, pertinent antecedents were almost totally lacking, save for verbalisms.

The contrast between this intermediate pupil's reading and that of a third-grade class for the same day is striking. Indian life was the center of interest in the third grade. The physical activity of this day centered around a sand table where an Indian village was under construction. Geography reading consisted of studying a museum map of the village, the map serving the pupils as a blueprint. The map served also as a guide for the art work—a picture of the village. The reading period was devoted to an account of Indian children. Social study dealt with the economic life of Indians. The health period was spent in a discussion of the Indians' diet. Unlike the fifth-grade pupil's reading, this day's reading, though varied and treated from different points of view, was unified, and it was developed from antecedents that were real and non-verbal.

Our problem of unification is that of insuring a foundation for reading experiences by continuing significant activity and by directing the reading in organized units. The problem does not call for restriction of reading experiences, but it

does call for psychological or developmental organization. Certainly, a time must come somewhere in the school when pupils can pursue profitably a diversity of topics. Otherwise, schools must abandon modern citizenship as a goal for pupils. The problem of unification is related, therefore, to the problem of diversification. Pertinent questions are these: When are pupils ready for diversification of varying degrees? Can the reading program be organized to reduce the abruptness of the transition from unification to diversification? Can administrative and supervisory planning facilitate a gradual transition by organizing teachers into co-operative groups? Can suitable materials be provided for extensive reading about centers of interests of intermediate pupils?

By the intermediate period, most children acquire sufficient skill to enable them to use reading as a technical key to extensive reading. But as far as general experience is concerned, these children are still very immature. Their verbal skill often exceeds their nonverbal experience. The technical difficulty of pronouncing words is less than the experiential difficulty of getting and using the meaning of the passages which they meet in a diversified program. To be within children's range of clear understanding, the reading experience should develop from a rich, pertinent background which insures not only verbal facility, but also reality and meaning. But, in spite of all the attempts to correlate, fuse, or integrate school work, diversification instead of unification seems to be prevalent in the intermediate grades. Many schools are developing programs which call not only for extensive reading but also for scattered reading. Extensive reading is not beyond the young child's powers, but a combination of extensive and diversified reading carries him almost neces-

Phonics and Polysyllables*

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PHONICS HAVE a recognized place in the teaching of reading. Despite many complaints about the ineffective teaching of phonics, there is common agreement that the child who cannot sound out the new words he meets is tremendously handicapped in any independent reading. In times past, the abuses in the teaching of phonics have called for sharp criticism and evaluation. It seems that the time has now come for constructive studies and for answers to the questions, (1) What phonics should be taught? (2) When should such phonics be taught? and (3) How should such phonics be taught?

Phonics have now no place in the first steps in teaching reading. All systems of beginning reading begin with sight methods, featuring above all else interesting reading matter and the thought getting attitude. After this beginning, in which the child will learn to recognize phrase or word units by sight, there comes a time when we wish to introduce sounding. There is much uncertainty as to when this time arrives, but the usual method is to introduce initial sounds during the first year and to complete a study of the chief phonic principles by the end of the second year. A review of these principles is undoubtedly needed in the third year.

By the fourth year of school, it is assumed that the average child has sufficient reading ability to carry on what is called extensive reading. That is, he is supposed to be able to read many books aside from his basic reading text book. In addition, he is expected to be able to

read content text books such as those in geography, history, science, health, or what not. From the fourth grade on, during every year of school, there is this same extensive reading, together with an ever increasing variety of content text books. As someone has said, the children learn to read in the first three grades and after that read to learn. "After that" means three more years in elementary school, three years in junior high school, and three years in senior high school, assuming that the child's schooling stops with the twelfth grade. Please note the contrast, three years in the primary grades and nine years beyond them.

Phonics are taught, as we have said, in the three primary grades. In those grades the children are learning to read the more commonly used words of our language. Phonics are taught, therefore, in direct relation to these commonly used words. In fact, there are statistical studies to determine what phonics should be taught. These studies deal with the most commonly used words. The well known study of Vogel and Washburne¹ analysed the vocabularies of twenty primers and first readers. The extensive study by Gates and others was based upon "A list of words that occur with highest frequency in the reading material likely to be encountered in the primary grades."² Many present systems for teaching phonics are based upon these studies. Other systems are based upon exactly similar material because they use the words in some indi-

¹ *Elementary School Journal*, February 1923. Vogel, M., Jaycox, E., and Washburne, C. W. "A Basic List of Phonetics for Grades I and II."

* Read before the National Conference on Research in English, February 26, 1938, in Atlantic City, N.J.

² *New Methods in Primary Reading*. Arthur I. Gates. Bureau of Publications, Teachers College, Columbia University, 1928.

vidual set of primary readers and follow the methods of study set forth by Vogel, Washburne and Gates.

From this situation a very pertinent question arises. We find the schools teaching phonics which are based upon an analysis of the common words, which are predominantly *monosyllables*, or monosyllables with inflectional endings such as *-ed*, or *-ing*. But we have just said that it is during the nine years which follow the primary grades that phonics is going to be needed both for extensive reading and for study of content text books. Therefore, *a phonic system which is built upon monosyllables is to be used upon new words which are predominantly polysyllables*. How far this is true can be seen by a glance at the Combined Word List.³ This list combines eleven of the best known vocabulary studies and gives in one alphabet more than 19,000 words (dictionary basis). Of that number, more than 16,000, or about 81 per cent are polysyllables. These 16,000 are predominantly the words which the child will meet in his reading from the fourth grade on. They are the words which he is going to have to sound out. Our question is therefore, "Are the phonics which are now taught the kind best suited to help in the attack on these polysyllables which will present an unavoidable problem in all reading after the primary grades?"

To answer this question a study has been made of recent textbooks. From a newly published six-volume series of arithmetics, a sampling of 6,000 running words was taken, a thousand words from each book composed of ten sections of 100 words, these sections scattered throughout the book. Four volumes of a new set of geographies were sampled in the same way, giving 4,000 running words. Four volumes of a new history

series likewise gave 4,000 running words. The total was therefore 14,000 running words. Of this number 3,931, or 28 per cent were polysyllables. These polysyllables were listed and separated into syllables according to the practice of a standard dictionary. This resulted in a total of 8,509 syllables or 1,255 different syllables. Now it is understood that many polysyllables are sight words by grade four or later. Therefore the actual polysyllables among 14,000 words to be sounded out by pupils is not as large as the group we are discussing. Yet it may fairly be said that the syllables which we thus secured are in very large measure ones which children using these text books will have to sound out if they are going to read these books independently. Our question then becomes, "To what extent can phonics as now taught aid a child in sounding out these syllables found in a sampling of the text books he will be called upon to use?"

It is reasonable to say that two kinds of phonics are now taught in the primary grades. One kind may be called letter phonics. This includes the sounds of single letters and the sounds of consonant and vowel digraphs, which, though combinations of letters, have a single sound. The second kind may be called the teaching of phonograms, meaning combinations of vowel and consonants. This meaning of phonogram is the one we shall use here since it is a common usage, despite the technical definition of phonogram as any symbol which represents a sound. Teaching of letter phonics is characteristic of all systems. Practically all systems then go on to teach phonograms by assembling sight words into what are called phonetic families. The *-at* family for instance, may include *cat*, *bat*, *sat*, and so on. The *-ight* family might include *sight*, *right*, *fight*, etc. Some few persons have insisted that these families should be based upon word be-

³ *A Combined Word List*, B. R. Buckingham and E. W. Dolch. Ginn and Company, Boston, 1936.

ginnings, as in the *ca-* family which include *cat, can, cap, etc.* This belief has had little acceptance in practice and the use of the "ending families" is practically universal.

Our question then resolves itself into this. "Since primary phonics mean letter phonics or phonogram phonics, can these types of phonic teaching help in the sounding out of polysyllables which children must do in the nine years of school after the primary grades?" Since all words are made up of letters, it is obvious that letter phonics will help to some extent in the sounding out of any words, short or long. We are all familiar with children's attempts to sound out big words letter by letter and know the difficulties involved. It is a practicable method, though a clumsy one.

But how about phonogram phonics? Can that type of phonics help with polysyllables? To answer this question we first had to secure a list of accepted and widely taught phonograms. The studies before mentioned of Vogel and Washburne, and Gates furnished us with a list of "important" phonograms. As a further check we compiled a list of all the phonograms assigned to the first two years by the teacher's manuals of seven important sets of readers published since 1927. From these three sources the following list of twenty-four most "important" phonograms was compiled.

"IMPORTANT" PHONOGRAMS

Including all, except letters, digraphs, and blends, which appear on the Vogel and Washburne list, the Gates list, and in at least one of the seven manuals for grades one and two.

-ing	-or	-at	-op	-an	-on
-er	-ir	-et	-ow	-en	-old
-ed	-ar	-it	-ay	-in	-ake
-all (al)	-ell (el)	-ill (il)	-ight	-un	-and

There might be some disagreement as to the inclusion or the exclusion of a few of these phonograms, but this list is representative. It includes every phonogram

which was both on the Vogel and Washburne list and on the Gates list and which was mentioned in even one of the seven manuals.

We must here emphasize that all of these phonograms begin with a vowel. This is because they are all endings of monosyllables. By putting consonants before these phonograms many common monosyllables can be formed. By comparing monosyllables with different initials but the same ending, these phonograms may be derived. It is therefore not too much to say that the phonics of phonograms as taught at great length in the primary grades teach the children to recognize the endings of common monosyllables. The first three on the list are the only exceptions to this statement. They are *-ing, -er, -ed*, which are inflectional endings.

We may now ask, "Will this list of important phonograms, taught in the primary grades, help in the sounding of polysyllables?" We have just told how, by sampling arithmetics, geographies and histories, we found a total of 8,509 syllables in the polysyllables represented in only 14,000 running words. We have only to check our twenty-four "important" phonograms against this list of syllables to get something of the answer. We shall use the total number of syllables instead of the number of different syllables because the total better represents the situation that confronts the child, since we could not show to what extent some were repeated and others were not.

In the teaching of phonograms there is a very common belief that we are teaching syllables which will be met with later on. Therefore, we must ask "Are the 'important' phonograms the same as syllables in longer words?" Table I which follows conclusively shows that they are not. In fact, in only 11.6 per cent of the cases do syllables and phonograms correspond, and more than half of this cor-

respondence can be credited to the first four phonograms, which are signs of inflection and are therefore added at the

TABLE I

HOW FAR THE 24 "IMPORTANT" PHONOGRAMS
HELP IN PRONOUNCING THE 8,509 SYLLABLES

Phonogram	Times found as a syllable	Per cent	Times as a part of a syllable	Total per cent
-ing	240	2.8	17	3.0
-er	223	2.6	467	8.
-ed	125	1.4	204	3.8
-or	16	.2	164	2.1
-ir	2		15	.2
-ar	21	.2	177	2.
-at	14	.2	68	.5
-et			60	.6
-it	15	.2	77	.8
-an	71	.8	283	3.9
-en	50	.6	273	3.5
-in	93	1.1	160	1.8
(not counted in -ing)				
-un	21	.2	102	.5
-on	3		320	1.9
-all (al)	74	.9	143	2.5
-ell (-el)	23	.3	40	.7
-ill (-il)	4		86	.9
-op	5	.1	17	.3
-ow			95	1.1
-ay			20	.2
-ight			7	.1
-old	1		8	.1
-ake			1	
-and			20	.2
	1001	11.6	2826	38.7

end of words of all lengths. Of the other twenty phonograms only one, *-in*, reaches even one per cent of the total cases. Six of the phonograms never appeared at all as a syllable.

Clearly, if we exclude the inflectional endings, we may say point blank that the "important" phonograms are not syllables in polysyllabic words. Teachers who believe that in teaching phonograms they are teaching syllables are very much mistaken. The reason for this result is easily seen. The rule for syllable division is that consonants between vowels go with the vowel that follows if they can be

pronounced that way. This means that in most cases syllables *begin with* consonants. But our list of "important phonograms," the ones so widely taught, all *begin with vowels*. Therefore we might well expect that these phonograms could not be the same as syllables. This is what the statistical study found.

There is, however, a most unorthodox way in which these phonograms might be helpful. These phonograms do appear in polysyllables, but not as syllables. In fact, in the 8,509 syllables these phonograms appear 2,826 times. For instance, two phonograms appear in the word "important" and a child might sound out the word in this way "im-p-or-t-an-t" although the word should be divided "im-por-tant." A child might find three phonograms in the word "permanent" and sound it "p-er-m-an-en-t" though the dictionary divides it "per-ma-nent." A child might find three phonograms in "material" and divide it "m-at-er-i-al" instead of "ma-te-ri-al." These examples show that though phonograms are seldom syllables, they may help in pronouncing syllables. We here find *-or* as part of *-por* and *-er* as part of *-per*. The phonogram *-an* is in *-tant* and *-en* is in *-tent*. At the same time we find that these phonograms at times combine part of one syllable with part of another, as the *-an* in "permanent" and the *-at* and *-er* in the word "material." This is very likely to happen because all these phonograms begin with a vowel and end with a consonant. True syllables, as we have said, generally begin with a consonant and often end with a vowel. Therefore the phonograms, which begin with a vowel, are quite likely to cut across syllable lines.

If children have been taught to see these monosyllable endings during the primary years, we must expect them to see the same letter combinations in the long words that they meet. This study suggests that these twenty-four phono-

grams might be of help in this kind of pronouncing in perhaps one-third of the syllables in content text books. But do we want children to use letter combinations that at times cut across syllable divisions? Are these phonograms, vowel-consonant combinations derived from the endings of monosyllables, of sufficient use to justify any reliance upon them in an attack on polysyllables?

The other type of primary phonics, letter phonics, is and always will be of constant usefulness in reading. Every adult will find himself using letter phonics when he meets strange words. Even if most of the word is familiar, he will use letter phonics on the unfamiliar part. In primary teaching, letter phonics have been at times discredited because of the difficulty children have in blending. But with the yearly increase in mental age, difficulty in blending becomes less and less. This continued usefulness of letter phonics should be frankly recognized at all levels of school work.

But letter phonics are not our only possibility for attack on polysyllables. There remains an attack on the sounding of polysyllables which has been much neglected. It is the thorough teaching of syllabication. The need for breaking up long words into parts is with the child constantly in every book subject from the fourth grade on through high school, through college, and through later life. Yet if you will ask teachers, you will find very few at any level who have any clear conception of how to divide a word into syllables. They know the sounds of the long words they meet and when a child asks how to say a certain word they tell him. They do not realize that in reading by himself the child must either skip the unknown word and go on or must give some sort of incorrect sounding to it. The teacher's chief advice is, "in case of doubt, go to the dictionary."

What the schools definitely need is a teaching of the phonics of polysyllables. The work can be begun as soon as the children are mature enough to concentrate on division of words into parts. It needs to be continued year after year until there is real facility in this attack on long words. Rules may be taught, but much practice is necessary to develop skill. Facility in attacking polysyllables will go far in eliminating much of the remedial work in reading in the upper grades and in high school. Here is a neglected field of instruction. We have neglected it because we have assumed that the job had been done in the primary grades. Experience shows that the job has not been done. The figures which we have presented show that the job can hardly be done by the methods now universally employed. Children need to sound out polysyllables during all their years of reading. We must definitely plan to train them to do so.

Having urged the teaching of syllabication as the true attack on the sounding of polysyllables, we must emphasize that it is a means to an end. After we break words into syllables for a long enough time, we begin to find many syllables familiar. They become at last *sight syllables*. We see them quickly in new words and know at once how they sound. One of the sight syllables that we recognize instantly when we see it at the beginning of a long word is *pro-*. Another is *-tion*, that we see so often on the end of long words. When we see a new long word, therefore, we are likely to recognize some of the syllables instantly and have to sound out only one or two others. Syllabication leads to the learning of sight syllables. Letter phonics serve as an expedient when all else fails. But phonograms are of doubtful help in the attack on polysyllables that is essential for independent reading at all levels.

Teaching Ten Thousand Children to Read

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THE WORK RELIEF program sponsored by the Federal Government has meant many things to many people, but far too few citizens realize what the opportunity for work, with even a meager pecuniary compensation, has meant to thousands of so-called white collar workers who were caught in the financial deluge of the past six or seven years.

Of these unemployed workers, many were college trained young men, and women. Society had invested untold thousands of dollars in their elementary, secondary and collegiate education. With life before them, they were indeed the custodians of the very life-blood of the nation. No consideration in the vast panorama of national events during the years 1930-36 was more vital than that the moral and intellectual integrity of this army of unemployed youths should not deteriorate.

In New York City a legion of young teachers had impatiently been marking time since their graduation in 1928, 1929 and 1930. The family purse had been drained in order to secure for them the coveted college diploma. After graduation they had successfully passed examinations for teaching in the New York City Schools. Parents began to view with impatience their restless offspring who in normal times would have been contributing to the family budget.

At the same time in the crowded classrooms of the city schools there were thousands of children who had failed to adjust

to mass education. In a survey made by the New York City school officials in the fall of 1933, it was reported that at least eighteen thousand children in the elementary grades in the five boroughs of the metropolis were so retarded in reading that they were in need of tutoring to salvage them from educational defeat. Leaders in the school system had long been aware of this need but they lacked the necessary funds to put into operation any wide-spread program of individualized instruction. Paradoxically enough, the financial depression made possible in the following way such an educational luxury.

In January, 1934, 432 unemployed teachers who were holders of a New York City elementary license number one, or of a substitute license to teach in the elementary grades were enrolled as coaches in a remedial reading project. Officially the project was known as #1069 and was under the control of the Civil Works Administration. Twenty-four graduate students in education, who were recommended by Dr. Arthur I. Gates of Teachers College, were placed in charge as field supervisors. By January, 1936 the number of coaches had increased to 619. In these two years nine to ten thousand children, who were problem cases in reading, had had the advantage of individualized instruction in reading for one period each day.

Despite many handicaps, the reading coaches entered into their work with genuine enthusiasm. Only a limited num-

ber of children were assigned to each of them in order that they might have an opportunity to build up their technique and to keep their instruction strictly individual.

Before embarking upon a program of remedial instruction, the coaches were urged to make a careful analysis of the causes and nature of the difficulties which were interfering with successful learning. An initial battery of standardized intelligence and reading tests was given. All accessible data that could throw light on the child's developmental history and home background were utilized: his physical handicaps, his dominant personality characteristics, and his school history, especially the teaching procedures that were followed in his initial steps in reading.

In the course of the development of the project, duplicate forms of standardized reading tests were given at the beginning and close of each semester's work. An individual permanent record sheet was devised on which the results of the tests were recorded, together with the reading gains and brief summaries of the reading diagnosis and remedial procedures.

One of the outstanding reading defects, noted alike by supervisors and coaches, was the limited speaking and reading vocabularies of the pupils. For example, common words such as "cup" were unknown to some children who came from homes where no English was spoken. Stress was therefore laid upon developing the meaningfulness of words by oral discussions, by pictures and lantern slides, by dramatization, and by correlating the vocabulary development with all activities in which the children were vitally interested.

In addition, a controlled technique was developed for acquiring the fifteen thousand words in the Gates Primary Word List. These are the words most frequently encountered by the child in the primary readers in common use. These words were

divided into vocabulary units (twenty words to a unit), and arranged approximately in the order of frequency of use. Preliminary diagnostic reading tests were then constructed for each of these vocabulary units. The vocabulary tests were accompanied by reading units in which these basic words were incorporated.

In a few months the transforming effect in the school work and school behavior of erstwhile problem children began to be noted by both principals and classroom teachers. What was the secret of the fact that lazy, sleepy-eyed Mary or obstreperous Johnny was beginning to take an interest in the bug-bear subject of reading and at the same time was bracing up, all along the line, in other school work and behavior? Surely no one method of instruction was responsible, since each coach was urged to use the method of approach which met the specific needs of each child. What was stressed, however, was the individual method of approach in teaching and the inculcation of the play spirit in remedial instruction. Much ingenuity was shown by the coaches in thinking up new and varied reading material to enliven work that formerly had been baffling and uninteresting.

What a teacher with a sympathetic attitude can do with a school failure is illustrated in the following brief summary of the case of Michael.

Michael was a typically erratic, emotionally unstable "bright" child who was a failure in reading. He was seven years old and in the 2-A grade. On a mental test he rated superior in general intelligence.

Michael came from a home that was in fairly comfortable circumstances. He was given a daily allowance which he frequently invested in his favorite lunch of "hot dogs" and soda. When this particular combination did not succeed in bowling him over for the afternoon he appeared regularly in the coaching room

for remedial instruction. In appearance he was neat and clean and of average build. Michael was particularly annoying in the regular classroom because of his nervous, fidgety ways and his apparent inability to concentrate on any task for more than a few minutes at a time. The teacher reported that his sole ambition was to grow up in order to go to war and be shot. Thus ruminating on his untimely demise he seemed to find consolation for his lack of progress in all his school work.

His stock of readily recognized words consisted of *so* and *is*. With this meager vocabulary he tried to bluff his way through a story which he had heard others read by substituting any words which came to mind. He had no knowledge of individual letters or letter sounds and consequently no method of attack upon new words. Another defect was his tendency to read words and letters backward.

Michael's coach was provided with graded seat work units which required from ten to twenty minutes for completion. They were intriguing to Michael because they were like puzzles which he was challenged to solve. Success was like wine which aroused new hope and interest. He attacked each lesson each day with confidence that he could master it. Gradually undesirable reading habits were eliminated and in their place were substituted effective habits of learning.

His improvement was a source of delight both to himself and to his teachers. In one hundred days of coaching he made a gain of 1.3 grades in silent reading and 2.4 grades in oral reading. His reversal tendencies in reading were eliminated and also his resulting confusion of simple words such as *big*, *dog*, or *no*, *on*. He can now read readily at a third grade level and thoroughly enjoys reading. His improvement in co-operation and social habits in the classroom is convincing proof that the coach who is helping the stumbling child over his reading handi-

cap is at the same time carrying out a very effective mental hygiene program.

Pupil failure in school should become as antedated as the mangling practices of a mediaeval torture chamber. As Albert Wiggan has expressed it, "I would far rather you would maim and physically injure a child of mine than to frighten it or destroy its healthy self-confidence." This undermining of healthy self-confidence is exactly what failure does to a child, and, sad to say, frequently at the very threshold of his school life.

To attack and conquer the problem of pupil failure will exact of the teaching profession the same patient perseverance and untiring effort, personal sacrifice and keen analysis that has been shown by other scientific workers, as, for example, the naturalist in his control of plant growth and mutations. Examination of conditions indicates that reconstruction must take place all along the line. We are just as vitally concerned in analyzing the factors in the school organization that cause pupil maladjustment as we are in detecting tendencies in the individual pupil that are thwarting, or will result in thwarting, his adaptation to the school and social regime. In support of this statement, witness the zeal for curriculum reconstruction which is sweeping the country as well as the many experiments in school reorganization which have been tried in the attempt to adjust the school to the child. The concomitant trend toward the more intensive and scientific study of the individual is revealed in the unprecedented growth during the past decade or two of educational and psychological clinics, child guidance bureaus, and the steady increase in the corps of visiting teachers, school psychologists, psychiatrists, educational diagnosticians and other specialists in educational and vocational guidance and remedial instruction.

The many problems attendant upon the

mass education of all the children of all the people ushered in this new era in education. School surveys revealed an appalling amount of pupil retardation and elimination; the increasing use of group and individual tests showed the wide range in pupil achievement in any class and in any subject; the crowding of thousands of children in elementary and high schools left pupils totally unable to meet the demands of the school situation; and the increase in juvenile delinquency centered the attention of educators, as never before, upon the question of pupil maladjustment and upon the possibilities of individualized instruction.

Much can be done by providing adequate materials and reorganization of work in the regular classrooms. But, even under the best of classroom conditions, a small percentage of children remain, who, at critical stages in their progress, need the stimulus which the coach, as teacher and friend, is in the best position to give them. The corrective work in social re-

adjustment as well as in remedial instruction which was done by the coaches in the New York City project, indicates clearly that provision for such individualized instruction is not a luxury but a necessity in our modern schools.

Because of the complexity of the social forces which promote or stunt the development of childhood, the problem of juvenile maladjustment and delinquency must be attacked by many workers in many fields of social life. The teacher's contribution is to be alert to one of the first symptoms of maladjustment, namely, slumping in school work. Because of what has been accomplished so far, it is not an exaggeration to say that the prevention of school failure by adequate provision for pupil analysis and instruction in the initial stages of maladjustment, will prove to be one of the most effective weapons in the conquest of those social problems which are primarily due to the failure of individuals to adjust to the social order in which they are a part.

THE UNIFICATION OF READING

(Continued from page 119)

sarily into confusion and verbalism. Gradual, meaningful development is thus made so difficult that the reading program contributes to emotional disturbances instead of contributing, as it might, to their prevention. The writer believes that much of preadolescents' frustration and consequent compensatory fantasy and activity mentioned above can be laid at the doorstep of those who plan reading programs that are both diversified and extensive.

As a remedy for this situation, a campaign is urged for an examination of the effects of intermediate reading upon pupils. These effects should be examined in at least three types of schools: those in which reading is now extensive and unified; those in which reading is exten-

sive and diversified; and those in which reading is meagre but diversified. Children of at least four general types should also be examined: those who appear to be "normal"; those who are "disciplinary" cases; those who are docile; and those who are listless. It is not presumed that the reading program is the principal cause or even a contributory cause of all the pupil difficulties in the intermediate period, or that the improvement of the program is a panacea. It is believed, however, that significant data can be collected by such an examination as the one proposed, and that such data could guide us toward an improvement in child development. It is anticipated that such data would call for an extensive but unified program in reading.

A Reading Activity in Grade One*

SISTER RICHARDINE

Corpus Christi School, New York City

NOTE: Sister Richardine describes in this paper the way in which a diary record of the most interesting or most important event of each school day was developed during a full school year. The diary itself is fascinating reading to one interested in the range and richness of experiences enjoyed by children in those schools where children's interests are respected and guided. The cumulating effect of the day after day account of experiences is not only impressive but becomes increasingly convincing evidence that children may, under sympathetic and wisely purposeful guidance, be depended upon to seek and carry on activities which promise desirable growth. The inclusion in the diary of children's work such as illustrations of the recorded events and samples of construction work adds to the expressive nature of the record.

The second part of this report (to be published in May) presents a vocabulary analysis of the diary. The sample pages reproduced in Sister Richardine's discussion give an inadequate indication of the very appropriate word structure of the record. Short, simple, direct statements were used, complete and final as to ideas, such as is characteristic of young children's thinking and language expression.

This report presents a minor phase of a study of reading readiness and reading progress in primary grades, and was prepared with the assistance of the U.S. Works Progress Administration, New York City, project number 65-97-295, sub-project 25.

FRANK T. WILSON,
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I TEACH READING in first grade. There is, I know, a growing sentiment abroad in the newer schools to postpone the formal teaching of reading until second grade and even then not to insist that all children have any measurable reading accomplishment before leaving that grade. By far the great ma-

jority of our public and private schools are not in a position to consider this proposal seriously. There is, however, a consideration that ought to be faced immediately and with grave concern by our school administrators regarding the matter of first grade reading.

Writers on the subject of teaching reading in the elementary school quote with justifiable alarm statistics showing the percentage of failures in the elementary grades due to reading. They point out the cause with unerring accuracy: "mental immaturity, not necessarily low intelligence—simply a mental age too young to acquire reading skills." Much is written about postponing the teaching of reading until the child exhibits "reading readiness" but no provision is made for the child to whom "reading readiness" does not come until he is seven, eight, or more years of age, other than the ignominious one of retention in the first grade. Why will not administrators and superintendents and school boards and writers of courses of study see that since all children cannot possibly be taught to read at six years of age provision should be made for them to be taught when they are seven, or eight, or nine, without forcing them to remain with the six-year-olds who are socially, physically, intellectually younger than they?

Why cannot the problem be met in a way more just and reasonable by preparing the teachers in all elementary grades to teach reading to the children in their grade who come to "reading readiness" at that age level? Immediately the cry is

* Prepared under the direction of Dr. Frank T. Wilson, Hunter College, New York City.

raised, "Shall we lower our standards in the upper grades by giving our time to teaching what properly belongs in the primary and, more especially, in the first grade?" It is time that we look squarely at these same standards that we ourselves have built, often on the dismal scene of forced failure on the part of approximately one fourth of our first grade children. Reading in the first grade, as well as in grades above the first, can be one of the happiest experiences of the children if, first, in the teacher's mind is the recognition that not all children who reach the age of six years are ready to read and, second, if the teacher is freed from the devastating yoke of a course of study that places reading achievement as a requirement for promotion at the end of the first year.

But how teach reading so that it is truly a pleasurable experience? Reading is an art as well as a tool. As a tool we must give instruction in its correct use. As an art we must cultivate its appreciation.

The mechanics of reading are best taught in the actual situation in which they will be used, namely, in reading, and more specifically, in book form. There are on the market now easy, attractive preprimers which develop the vocabulary slowly and present new mechanical items such as longer sentences, question marks, quotation marks, etc., after definite preparation for the new matter. Certain of these publications have, moreover, been admirably attentive to the content of the reading material embodied in their pages.

There is, however, that other phase of reading which should be considered from the very start—reading as an art. In order to explain how the two can function at the same time, each contributing its own share to the complete classroom program, I shall describe a piece of work that was carried through an entire year in a first grade room in 1936-1937.

School opened on September 14. A

moving picture program was given that morning at assembly. In the afternoon the children talked freely about the picture. Interest was so high that the teacher asked the children if they would like to record this experience so that they could read it again some time and remember how much they enjoyed it. The children offered many suggestive statements describing what was seen. At length they decided to record these facts:

Monday
Room 202

September 14

We went to a talkie.
It was down in the auditorium.
We liked the funny part and the part about trains.

The teacher proposed drawing a picture of the parts they had liked best and so headed one section "The Funny Part," and the other, "The Part About Trains." Two children were chosen to do the drawing.

The next day another unusual happening gave material for a second entry into what, as early as this, gave signs of becoming a diary, so high was interest in it. As day followed day the children suggested important occurrences which they would "want to remember" and so page by page their daily journal grew.

The period given to compiling a page of the diary came at any time from nine in the morning to three in the afternoon, depending only on the interest in the matter to be recorded and the non-interference with any definitely scheduled plan on the program. Many times, shortly before going home on days that were very busy or perhaps seemingly uneventful, the teacher would be reminded that "we haven't written the diary" and the class would set about it right there and then, record an item or two that proved significant, and then the children would go home without rereading or rehearsing of any kind.

It is at this point that I think it best to make very clear to the reader the purpose and value I believe to have accrued from this particular reading experience.

First, it was a *general* reading situation in which *all* the children took part—"readers" and "non-readers" alike, some contributing ideas, others rewording the ideas into better expressed sentences, others interpreting with crayons the message printed, others still simply enjoying the fact that they themselves were subject matter for reading.

Second, the unifying effect of a general experience in reading (direct teaching in reading was given to small groups of children using different readers) had social significance which played a definite part in the school set-up. Everyone could contribute. Everyone composed the material. Everyone knew what it said (without drill—simply because the children themselves dictated what should be said). Everyone was free to read it at his or her leisure, alone or to the others. (The diary pages were bound between oak tag covers labelled with the name of the month they represented.)

Third, a vocabulary which grew with each new concrete experience was fortified by becoming a part, not only of the speaking vocabulary, but also of the reading vocabulary as well. There was no checking with formal word lists to see if it was advisable to allow words such as "electric clock," "dramatizing," "auditorium," "insulated," etc., to be used. Nor was there any attempt to make sure that each new word was repeated a sufficient number of times to insure its automatic learning. The situation was a real life situation, and accepted as such, it was kept free from any "method" laden procedure.

Fourth, it was apparent that the children had incorporated these "unusual" words into their reading vocabulary. Announcements on the school bulletin board

of a coming event were read by individual children unaided and interest was very high when other children realized that they too, could read these signs. A *puppet show* to be given by the fifth grade in the *auditorium* was heralded by a poster displayed in each of the school hallways. Several of these first grade children read the sign as they came to their classroom. The words *puppet*, *show*, and *auditorium* were used previously in their diary. Other instances of such carry-over might be cited, such as voluntary interest in *The News Flash*, the school newspaper, and in printed notices sent to the homes.

A word as to the actual materials used for the diary: the paper was newsprint size, 18 by 24. After the first week or so the teacher suspended a page, previously lined with some five or six lines about three inches apart, from the chart-holder rack above the blackboard. The first line was reserved for the day and date, and the teacher usually wrote this only after soliciting it from the children. However, sometimes she put it there first and then asked them to interpret.

The teacher used a black crayola and wrote in manuscript writing. Here, too, was an opportunity. Most adults do not realize that a child, when first introduced to the printed page, has to be directed to look first at the left side, move the eye forward along the line, and when the extreme right is reached, shift back to the left and below to the next line. By writing before the children this important lesson was taught without formal drill or strain.

The illustrations were quite delightful in their childlike possibilities. Many times no pictures were drawn. Again, invitations, handbills, letters received, blueprints, cut-outs, were pasted in, in place of drawings and gave evidence of the versatility and possibilities for expression of which these little children were capa-

ble. In several instances the children printed right on the diary paper. One diary page was completely composed and printed by one little girl.

Certain absorbing interests which were of great concern to the children over an extended period of time found natural expression in the diary pages. For example, the St. Patrick's Day play which they prepared and presented in the assembly was heralded and announced again and again.

Wednesday Feb. 24, 1937

We are practicing our play for St. Patrick's Day. We chose the characters today. The play is about St. Patrick.

Monday March 1

We chose new helpers today. They will keep their duties all month.

St. Patrick's Day is on March 17. Our Play is on that day.

Easter is March 28.

Tuesday March 2

Joan came to say good-by to us. She has moved away.

This morning we began to make our costumes for the play.

Wednesday March 3, 1937

A new girl came to school to take Joan's place. Her name is Joan Marie.

We practiced our play on the stage in the auditorium.

Friday March 5

We worked on our costumes today.

The king has a sword, a cape, and a crown.
James Dineen

Thursday March 11

We wrote invitations to our play. Everyone in school is invited. Our fathers and mothers, the priests, the sisters, and our friends are coming too.

Friday March 12

Sister took pictures of the children in their costumes.

St. Patrick's Day

We gave our play in the Auditorium. Everybody liked it.

In the afternoon the kindergarten gave us a party.

The adult reader of this first grade diary is struck by the simplicity of sentence structure and brevity with which ideas are expressed. But in this very item is proof sufficient for the authenticity of the youthful editors. Children express themselves in as few words as is possible to convey their idea to a listener. But the teacher who can give her children a wealth of new words with which better to express these ideas, and can provide an opportunity for their immediate use has contributed a great deal toward enriching their lives even at this early date.

Did the children spontaneously reread the diary at a time not given to the writing or preparing of it? Yes. I recall two children leafing back through more than a month's contributions to find a certain word they wanted to use in a letter they were writing. Sometimes the interest was in admiring a particularly fine illustration; to see "how long ago we did that," or to read again about our trip to the fire house—"I liked that so!" Frequently individual children would ask for paper to copy the day's diary—"I want to read it to mother."

Could all the children read the diary a week or longer after it was written? No. And again I say this was the proper situation. The teacher made no attempt to see that everyone had mastered the words. Even those who could not read it enjoyed it and felt it was theirs. Our adult tastes are like that. Some of us have good books that we read and reread. Some are satisfied to read a book once. Some obtain the good book, know it is good by hearsay, treasure having it, but never read it through.

It is not claimed that the children, by having this experience, grew to read better than other children who read mostly from books. (These children were not deprived of the usual primer and first reader opportunities common to first

(Continued on page 160)

Basal Readers

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THE PLACE ACCORDED basal readers by the *Thirty-sixth Yearbook*¹ caused surprise particularly among those school people who have not used these books to an appreciable degree during the past decade. Those who are not using readers in the upper grades would have liked support for, or perhaps more extensive evaluation of, their practice; and those who are not using them at all would likewise have welcomed comment. Yet, these emotions belie the actions of these people. They have wrought a reading program without plaudits or prophets. Their job, if you would take their word, was building a reading program that would best suit the needs of individual children. It is a well known fact that in pursuing their course they have ignored the warnings of reading authorities that systematic instruction, which has usually meant the use of basal readers and their accessories, should be provided to insure orderly vocabulary development, adequate introduction of basic skills, et cetera. This group, according to Dr. William S. Gray² holds that systematic accurate guidance in reading outside the reading period best maintains and develops habits initiated in the primary grades; that skills can be developed most effectively as needs for them arise in various curricular subjects; and that "desirable reading attitudes and interests" are stimulated through guided independent reading. In refusing to endorse this program, the Reading Committee of the National Society states that

its chief value "lies in its emphasis on training for immediate use and in situations that insure highly motivated application." The writer believes this evaluation to be only half true.

This paper is not intended as a criticism of the Reading Committee's total work, nor is it an attempt to relate a group's reaction to the Yearbook. Rather this is a consideration of a program which purports to develop the reading ability of the child and to meet his future needs without the use of basal readers which are considered by the rank and file of school people as the *sine qua non* of good reading instruction. Therefore only one phase of the committee's work will be discussed. It is sufficient to say that basal readers are only one type of a number of materials recommended for a balanced program.³ Further, it is well to point out here that we are discussing difference in materials and methods and not in time devoted to the teaching of reading.

There are a number of arguments propounded for extensive reading by its advocates. Prominent among these is that we have reached a stage in the development of reading materials when books of poetry, stories, science, that are written especially for children have made basal readers superfluous. There are various levels of these books to be had in almost all the subjects. The Report of the White House Conference⁴ on "Children's Reading" assures us that these books are being printed rapidly, which is indicative of the concentrated environment of our

¹ *Thirty-Sixth Yearbook*, Part I. "The Teaching of Reading." A Second Report of the National Society for The Study of Education. Public School Pub. Co. Bloomington, Ill. 1937.

² *Ibid.*, p. 108-109.

³ *Ibid.*, p. 248.

⁴ "Children's Reading." Report of the White House Conference. P. 14.

children. The Report points out the increase in publication of children's books since the war, until, in 1928, it was estimated that juvenile books constituted one-seventh of the total output, and children's books found a market the year around. The possibility of using these books for developing the skills and interest in reading has been pointed out by Dr. Edward L. Thorndike.⁵ His proposal that we label books according to their difficulty so as to provide a higher type of guidance is excellent.

Basal readers are expensive. The compromise recommendation generally made that some of all types of material be purchased misjudges the average school budget. This was only \$1.27⁶ per pupil in 1934. Even if we estimate that there has been an increase in this amount since the depression, schools will scarcely purchase more than is required for the very essentials. When the school administrators are lead to believe that the first prerequisite of a good reading program is sets of books, even though they be small, the library reading books are not purchased.

The introduction of reading skills has been changed considerably by the very complex reading environment in which the child lives. The thought that a number of copies of a single title are needed to introduce and teach such skills as the use of the index, use of the dictionary, the gathering of information against a problem, is quite contrary to what is actually happening. One child with some aid from the teacher, taught herself and six others to use the dictionary a year and a half before the school traditionally introduced this book. When this point was reached by this group the needed instruction was not introductory, but rather

helping various individuals in becoming more proficient in alphabetizing, using the guide words, et cetera. The idea that the program will be so systematized that these skills will not be introduced to anyone until a stated time to insure adequate habits, belongs to a very insipid program. One group became quite familiar with the index to an encyclopedia which they brought frequently from their homes and the library for the teacher to read several months before many of them had made great progress in reading. To say that the introduction of these skills is fortuitous is to argue that the whole program is without plan, which is not the case. Children's needs or children's ability to understand does shift the grade placement, but such should not confuse those in authority on what has taken place or what will follow.

Perhaps the most significant argument against the traditional program is that similar books cannot be used in dissimilar reading cases. A number of studies have been made during the past decade to show the wide range in reading abilities within a group. Remedial work is dependent upon securing appropriate materials. This point is well illustrated in what is considered a typical answer given the writer after a check upon the progress of the extensive reading program in a number of schools: "Our standardized test scores are equal to or above the attainments made when we used basal readers. The interest in reading is higher as determined by the voluntary reading. The children are able to ferret information from varied sources against a problem better. Indeed, there is much remedial work to do, but our research points to the fact that it is highly individualistic. One example is a fifth grade child who is doing very excellent oral reading but is on the second grade level in comprehension. She is sitting next to a child who comprehends excellently, but is very poor

⁵ *Improving the Ability to Read*, by E. L. Thorndike. Bureau of Publications, Teachers College, Columbia University, 1935.

⁶ "School Books and Supplies," Educational Research Service, Dept. of Supt. and Research Div., 1201 Sixteenth St., Washington, D.C. P. 9. Estimated cost per child in 303 cities.

in reading orally. Such individual needs cannot be met through the use of a single text even with a small group of children."

The difficulty of teaching thirty students who are using different books and many of whom are even doing a different type of reading, does not appear to be much greater than that experienced by a motorman who takes fares and operates the bus at the same time. A visit to a third grade classroom will give some idea of the teacher's work. The period for reading was at the close of the recess period. As each child sat in his desk or at a small table provided with books he began to read. There were only two children who did not begin to read immediately. These were described as "not yet interested in reading." Fifteen of the thirty minutes for reading were spent with six individuals who were from a grade to one and one-half grades behind the average of the group. The teacher gave the remainder of the period to those individuals who were doing fairly well in reading. The teacher worked with the poorer readers daily, and with the average about three times a week; those who were reading books of fourth and fifth grade level were not helped very often. Opportunities for checking the reading progress of all the students were to be had in a number of situations, such as the contribution periods, the story hour periods, science and social science periods. At the end of the third year, the median grade score upon the Metropolitan Test was 4.1 for thirty-three children. The ranges were from beginning second grade to sixth grade levels. Their reading interest, as determined by the children's voluntary actions, was far superior to their interests in spelling, and arithmetic, which were taught in unison. These children had read individually from the middle of the first grade.

Similar history was made in one school

system more than a decade ago. A combination of basal and extensive readers had been used in the upper grades for some time. The approximate division of time for each type of reading was half and half. The average Intelligence Quotient for this community was a little below normal, with a range from 75 to 120. Standardized tests given periodically showed that the children's average reading scores approximated the norm by a few points either one way or the other. There was a question relative to the value of sets of basal readers. Their use was discontinued and the time and money spent upon extensive reading. This program has continued until the present and there has been no appreciable change in the test scores since that date. The materials have changed, the method has become more individualistic, but the achievement, as determined by tests, and reading problems has remained about constant.

It is well to remember that this movement for teaching children to read through the use of a large variety of books has historical roots. Dr. G. Stanley Hall advocated the enrichment of the various subjects by means of reference books. He wrote in 1886: "A single text gives a narrow individual view of a subject at the best. In geography, e.g., a dozen or two books on the country studied are shown the pupils in school and circulated among them."⁷ The advice that is frequently given nowadays to teachers to purchase few books of a kind, but many kinds was made by Louise Arnold in 1899.⁸

Perhaps the strongest statement for liberalizing the reading program was made within the past twenty-five years. Miss Annie E. Moore wrote in 1916: "The question may fairly be asked

⁷ Hall, G. Stanley. *How to Teach Reading and What to Read in School*. P. 38. 1886.

⁸ Arnold, S. Louise. *Reading—How to Teach*. I Pp. 206-07. 1899.

whether many children might not pass almost unconsciously into the art of reading, and largely by their own spontaneous effort, if they were surrounded by the right stimuli, and freed from subjection to highly specialized, closely regulated methods, applied by over anxious adults who are determined nothing will interfere with the particular scheme in vogue."⁹ The report of the National Committee on Reading in 1925 denounced mass instruction even though it did go so far as to give the list of words a first grader should learn, and the books a well informed fourth grader should read. It stated: "Most mass methods are of administrative origin and have little pedagogical sanction. They originated in an era, the psychology, sociology and pedagogy of which are now passé and nothing but professional inertia accounts for their prevalence in this day and generation."¹⁰

In the spring of 1937 the writer sent fifty questionnaires to school administrators throughout the United States, to determine their appraisals of their extensive and basal reading programs. The twenty-five answers received were pretty well distributed among schools of suburban area, city, small town, rural and teacher training institutions. The weaknesses of the questionnaire tool for determining school practice are well known to everyone. This one was no exception; yet, the letters that accompanied many of the answers indicated much thought. Whether these answers represent anything like a true sample of practice in this country will not be argued. In all probability they do not, for the number of cases is small; nevertheless it behooves those of us who are interested in the present and future use of basal readers to

study the practice of these schools.

Twenty-one of the participants are using basal readers accordingly:

USE MADE OF BASAL READERS	
Grades	Schools
none	3
1st through 4th	1
1st through 5th	2
1st through 6th	13
1st through 8th	2

Readers were defined as similar materials generally provided for two or more children to read at the same time. These data indicate that while there are a few schools that do not make use of a basal reader, they are to be found in most of the elementary grades. However, it is well known that a large number of schools have basal readers as a heritage, and these are seldom used in concert reading. The question was therefore asked, "To what degree are you relying in the upper grades upon the extensive reading in various subjects (literature, library reading, science, history, geography, et cetera) for development of the skills and habits in reading?" Seven schools are depending entirely upon extensive reading for developing the basic reading skills, which is interpreted as meaning that those schools who have basal readers are using them as they do their library books. All except one of the remaining eighteen schools are relying 50 per cent or more upon an individualistic type of reading program.

The participants were then asked to list and check the general causes of backwardness in reading within their schools. After each participant had done this, he was asked to indicate the type of materials that he would use in this remedial work. The questionnaire listed two possible answers: (a) greater use of basal readers in the upper grades; (b) greater use of reading in the various subjects (library books, etc.). All save four thought it best to make a greater use of individual-

⁹ Moore, Annie E. "The Use of Children's Initiative in Beginning Reading." *Teachers College Record*, Sept. 1916.

¹⁰ *Twenty-Fourth Yearbook of the National Society for the Study of Education, Part I. Report of the National Committee on Reading*: Public School Publishing Co. P. 231.

istic reading materials for remedial work. In all probability the book orders in the majority of these schools are made to meet the needs of an individual, instead of a group.

Five schools supplied standardized test scores as evidence that it is possible to meet traditional standards without the use of basal readers in the upper grades (see Table I). There are interesting stories yet to be told of how many of the schools have secured funds for purchasing a large variety of books, and also how they have built libraries that function daily through the use of W.P.A. funds.

What is the future of basal readers in the upper grades? Certainly the current Yearbook gave them less space than the twenty-fourth. The chapters devoted to the library, problem reading, and experience reading, in present day professional reading books have crowded out or overshadowed much of the space once given concert reading in similar books. If we may assume that a decade ago the twenty-five schools used in this study were depending eighty-five per cent upon readers for developing the necessary skills, we may now say they have lost fifty per cent or more of their usefulness since that time. There is evidence as measured by standardized tests that reading skills can be developed through adequate guidance into extensive reading. These things lead us to believe Nila B. Smith's prediction "that the basic set of readers eventually will disappear. It may continue to wield its power for fifteen years or for fifty years, but in time it will march silently out of the classroom and be relegated to dusty attics along with its progenitor, the hornbook."¹¹

¹¹ Smith, Nila B. *American Reading Instruction*, 1934. P. 266-267.

On the other hand there are forces that will surely keep these books with us for a time. There are teachers and administrators who do not know how to rely en-

TABLE I
STANDARDIZED READING TEST SCORES
FROM SCHOOLS NOT USING BASAL READERS IN
GRADES 3 TO 8

Cities	Grades			
	III.	IV.	V.	VI.
norm		10.3	14.7	16.2
I. score		13	15.2	19.1
spread		9.6-19	10.9-21	15.8-22
norm		4.4	5.4	6.4
II. score		4.6	5.8	6.7
spread				
norm			5.1	6.1
III. score			5.6	6.4
spread			4.7-6.5	5.6-7.1
			(Range of the middle 50%)	
norm	3.8	4.8	5.8	6.8
IV. score	4.2	4.8	6.4	7.2
spread	2.0-7.0	3.0-6.9	3.6-10.0	4.7-10.0
norm		4.9	5.9	6.9
V. score		4.9	6.0	7.0
spread		4.0-6.7	4.4-7.6	6.0-8.0

tirely upon extensive reading for developing the reading skills. Thus time is needed to educate the new program. We have no evidence that this program can be worked in classes of forty-five and above. Certainly it would seem wise for school systems to spend their efforts reducing classes instead of attempting to adjust new methods to them. And lastly, the publishing of a popular set of basal readers is, perhaps, the most lucrative pedagogical business. Estimates by bookmen of the royalties of popular sets are from ten to five hundred thousands of dollars. It is hard for those who receive these sums to give a true evaluation of sets of books.

Vocabulary Instruction in the Intermediate Grades*

With Word Lists for Grades Four, Five, and Six

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THE CONSIDERATION of any single ability in reading often encourages overemphasis of that ability in the reading program. Vocabulary instruction alone will not insure adequate growth in reading ability in the intermediate grades. It might therefore be well to outline briefly the major phases of an instructional program in reading in order to give vocabulary work its proper place.

There is no general agreement among the authorities as to the abilities which should be taught in grades 4, 5, and 6. A tabulation of recent courses of study and of teachers' manuals for basal readers in the intermediate grades lists more than a hundred different abilities. Yoakam¹ lists 63 abilities under eight major headings for these grades. More than five hundred abilities are suggested by Wiley.² In order to meet the practical situation of planning an efficient instructional program, both for remedial instruction and for regular classroom work, it is necessary to reduce these long lists of abilities to a few general categories. It appears that these might be listed under the following headings:

1. Abilities related to improving the extent and nature of independent reading.
2. Comprehension and speed in silent reading, including freedom from faulty mechanical habits.
3. Study types of silent reading.
 - a. Thorough reading types, including reading for detail, to follow directions, to outline, etc.
 - b. Speeded or partial reading, such as scanning and locating information.
 - c. Associational reading.
4. Oral and written recall from reading.
5. The use of reference materials.
6. Vocabulary instruction, including word recognition, word meaning, word analysis, and dictionary study.
7. Oral reading abilities.

It is in the study type of reading that the greatest disagreement is found in the various lists of objectives and abilities. In the analysis and correction of reading difficulties at the intermediate grade level it will be found that a child who is taught to do the thorough types of reading often acquires habits of slavish and labored reading. In order to compensate for the decreased speed and lack of flexibility that comes from giving exercises in reading for details it is necessary to provide lessons for increased speed of reading, ability to locate information quickly, and abilities in scanning, etc. The slavish attention to the ideas of the author may be counterbalanced by assignments which re-

* Prepared for The National Conference on Research in English, 1938.

¹ Yoakam, G. A. "The Improvement of Reading in the Middle Grades." *Education*, 56:1-6, September, 1935.

² Wiley, J. A. *Practice Exercises in Silent Reading and Study*. J. A. Wiley, Cedar Falls, Iowa, 1928.

quire criticism, comparison, locating topics for further investigation or for special reports and activities, and other types of exercises which demand thinking and reading with a problem in mind. No single list, such as the above, will be found entirely satisfactory. A later Bulletin of The Conference should be devoted to simplifications of the many objectives now listed for the intermediate grades.

Emphasis on vocabulary instruction must always be counterbalanced by assignments which increase the child's ability in comprehension and interpretation of longer passages. Since exercises which call attention to individual words tend to produce over-analytic reading, it is particularly essential that some instruction be given to increase the child's attention to major ideas and to improve his reading speed. Unless these counterbalancing exercises are given, a drive on vocabulary will often result in a lower speed of reading, a greater attention to detail, and a loss in general comprehension or interpretation of larger units of reading. Standard test scores following an over-balanced program of vocabulary instruction may show that the total gain is very small because the increase in accuracy is offset by a loss in speed.

I. VOCABULARY LISTS

Two types of vocabulary are possessed by each individual: vocabularies involving the intake of ideas, and vocabularies concerned with the output of ideas. The vocabularies for taking in ideas are those of reading and hearing, while the output of ideas is cared for by the vocabularies of speaking and writing. Among children in the intermediate grades the hearing vocabulary is probably the largest, followed in descending order by reading vocabulary, speaking vocabulary, and writing vocabulary.

The established word lists deal chiefly

with the vocabularies of reading and writing, probably because these two fields are the easiest to measure. The most extensive and most widely used word count in reading is that of Thorndike,³ while the Horn⁴ list is pre-eminent in the field of writing vocabulary. These two lists, however, are primarily counts of adult material and the research behind them provides no suitable method of assigning the words to different grade levels. Faucett and Maki⁵ have combined these two lists for use in situations where the vocabulary instruction includes both reading and writing. Studies of hearing and speaking vocabularies have been limited to the young child in the primary and pre-school grades. The International Kindergarten Union⁶ vocabulary presents the speaking vocabularies of children prior to entering the first grade but no such list is available for the intermediate grades.

In the intermediate grades there appear to be generally available only studies of writing vocabulary. Buckingham and Dolch⁷ tabulated the words from a written free association test given to children in grades 2 through 8 and derived word lists for each of these grades. Fitzgerald⁸ obtained a word list from social letters written outside of school. Jones,⁹ Tidyman,¹⁰ and others have made studies of writing vocabularies for use in the construction of spelling lists. On the basis of the most commonly used words in present-day spelling books, Gates¹¹

³ Thorndike, E. L. *A Teacher's Word Book*, Revised. Teachers College, Columbia University, 1932.

⁴ Horn, E. *A Basic Writing Vocabulary*. University of Iowa, 1926.

⁵ Faucett, L., and Maki, I. *A Study of English Word Values*. Oxford University Press, 1932.

⁶ Horn, M. *A Study of the Vocabulary of Children Before Entering the First Grade*. International Kindergarten Union, Washington, D.C., 1936.

⁷ Buckingham, B. R. and Dolch, E. W. *A Combined Word List*. Ginn and Company, 1936.

⁸ Fitzgerald, J. A. *Letters Written Outside the School by Children of the Fourth, Fifth, and Sixth Grades*. University of Iowa, 1934.

⁹ Jones, W. F. *A Concrete Investigation of the Material of English Spelling*. University of South Dakota, 1915.

¹⁰ Tidyman, W. F. *A Survey of the Writing Vocabularies of Public School Children in Connecticut*. U. S. Bureau of Education, November, 1921.

¹¹ Gates, A. I. *A List of Spelling Difficulties in 3876 Words*. Teachers College, Columbia University, 1937.

constructed a list which provides a rating of the level of comprehension in each grade for the words on his list.

All educational writers agree that it is desirable to construct reading materials on a vocabulary that is in the main known to children. The word *known*, however, needs interpretation. Many words have the same printed form or, as it is usually expressed, a word has many meanings, and it is essential to know which of these meanings is suitable for each grade level. None of the word lists at the present time takes this factor into account. The Gates spelling list is a step in this direction, but the multiple choice method used yields only the grade placement of a single meaning of the word and involves reading abilities as well as comprehension.

For economy in learning at the early stages of reading it would be well to include in textbooks only those words which are already in the child's speaking or understanding vocabulary. This would limit vocabulary instruction in reading to a process of transference of word meanings from auditory symbols to visual symbols. By borrowing words and sentence structure from speech the only new problem encountered in reading would be visual perception of words and thought units. However, the child must also be taught the techniques of handling words not previously known since his understanding vocabulary is limited to his experience and since it is one of the functions of reading to enlarge experiences.

The hearing and speaking vocabularies of children in the intermediate grades have not been thoroughly studied, due primarily to the difficulties inherent in their measurement. Since the hearing vocabulary is probably much larger than other vocabularies it cannot be measured correctly by the use of tests which involve speaking, reading, and writing.

Durrell and Sullivan¹² have used pictures for measuring hearing vocabulary but this method is necessarily limited to a very small sampling of the total vocabulary. The measurement of speaking vocabulary requires a method of recording individual speech in some manner that will give accurate records for study but will not cut down the child's flow of words. The improved apparatus designed by Betts¹³ for recording oral language should encourage further investigations of spoken vocabulary. Brown¹⁴ using stenographic reports of 118 talks from 26 recitation periods in the fourth grade found that 89 per cent of the words used fell in the first thousand of the Thorndike List. Only 45 children were involved, but his research demonstrated the practicality of the method. In the measuring of hearing and speaking vocabularies a further difficulty is encountered in assuring adequate sampling of the child's range of interests and experiences.

Individual differences in the vocabularies of children of the same age complicate the problem further. Children at the same age level have different backgrounds in word knowledge and areas of experience. Although there are many standardizing agencies, such as wide distribution of books and national radio programs, current writing vocabularies show sectional differences. Differing mental ages among children in any grade add to the confusion. Since many studies show that there is a high correlation between mental age and vocabulary it might be desirable to provide word lists by mental ages rather than by chronological age or grade. Despite the most scrupulous care in constructing word lists and in defining their use, no single word

¹² Durrell, D. D. and Sullivan, H. B. *Reading Capacity and Achievement Tests*. World Book Company, 1937.

¹³ Betts, E. A. "Experimental Appraisal of Certain Techniques for the Study of Oral Language Activities." *Education*, 56:301-4, January, 1936.

¹⁴ Brown, M. "A Study of the Vocabulary Used in Oral Expression by a Group of Fourth Grade Children." *Educational Method*, 15:39-44, October, 1935.

list will be exactly suitable for every child. The best that can be hoped is that lists may be constructed to approximate more nearly the requirements of reasonably uniform groups of children.

While it might be desirable to agree upon a certain proportion of known to unknown words for each of the grade levels, and to establish a standard vocabulary for the development of materials for any grade, one cannot ignore the fact that a large amount of literature is already available to children at these levels which has not been based upon such a carefully developed plan. In establishing grade lists the factor of current usage in children's books should not be ignored. It is worth while to know what problems are to be met when a child transfers from one book to another.

VOCABULARIES FOR GRADES FOUR, FIVE AND SIX DERIVED FROM COUNTS OF BOOKS IN EACH GRADE

Some of the most urgent problems among slow learners, especially in the intermediate grades, could be helped by knowing the words most frequently used in books. As Thorndike¹⁵ showed, books recommended for a single grade level revealed a wide range in vocabulary on his list. The number of words to be met by the child in any of the intermediate grades is apparently almost limitless, while his power of learning words is definitely limited to a small fraction of this total. Economy in learning, then, demands that lists of words be drawn up which are most frequently encountered by children in reading in each of the intermediate grades. Such lists would assist not only in direct vocabulary instruction, but would also aid the teaching of transfer skills such as word analysis, word derivation exercises, study of word roots, etc. Such lists would also assist in making

a clearer correlation between the reading vocabularies and those of writing, spelling and composition.

The books selected for the present study were basal readers and social studies books in each of the intermediate grades. Seventeen books were used in grade 4, twenty in grade 5, and nineteen in grade 6. The books chosen for each grade were those in wide current use. While the basal readers predominate in each grade, social studies books were included since in present curriculum tendencies the social studies field constitutes a large part of the reading program.

The list of books used in each grade follows:

READING LIST

GRADE IV

- Lincoln Fourth. Isobel Davidson and Charles Anderson. Laurel, 1929.
- Storyland Book IV. C. M. Parker, M. Free, and H. T. Treadwell. Row Peterson, 1930.
- Elson Basic IV. W. H. Elson and W. S. Gray. Scott, Foresman, 1931.
- Fourth Reader (Revised Edition). Emma M. Bolenius. Houghton Mifflin, 1929.
- Work Play Book IV (*Magic Hours*). A. I. Gates and J. Y. Ayer. Macmillan, 1933.
- The Great Idea and Other Stories. B. R. Buckingham. Ginn, 1934.
- Trails of Adventure, Book IV. M. Browning, H. Follis, U. W. Leavell, and E. G. Breckenridge. American Book, 1936.
- Book Friends. R. L. Hardy and E. Turpin. Newson, 1929.
- Atlantic Readers, Book I (*The Understanding Prince*). Randall J. Condon. Little, Brown, 1928.
- Pathway to Reading (Fourth). B. B. Coleman, W. Uhl, and J. F. Hosic. Silver, Burdett, 1926.
- Adventures in Reading (Fourth). E. E. Smith, O. Lowe, and I. S. Simpson. Doubleday, Doran, 1928.
- Nature and Science Readers, Book IV. E. M. Patch and H. E. Howe. Macmillan, 1934.
- Thought Study Readers, Book IV. P. R. Spencer, R. Gans, and H. W. Horst. Lyons & Carnahan, 1929.
- Everyday Classics, Fourth Reader. F. T. Baker and A. H. Thorndike. Macmillan, 1928.
- Ourselves and Our City. F. G. Carpenter. American Book, 1928.

¹⁵ Thorndike, E. L. "Improving Ability to Read." *Teachers College Record*, 36:149, 123-44, 229-41, October, November, December, 1934.

- Around the World with the Children. F. G. Carpenter. American Book, 1927.
- The Earth and Living Things (Pathways in Science). G. S. Craig and B. D. Hurley. Ginn, 1932.
- The First Three Hundred Years in America. M. G. Clark and W. F. Gordy. Scribner's, 1931.
- Home Folks. J. Russell Smith. John C. Winston, 1934.

GRADE V

- Fifth Reader (Revised Edition). Emma M. Bolenius. Houghton Mifflin, 1929.
- Lincoln Fifth Reader. Isobel Davidson and Charles J. Anderson. Laurel, 1928.
- Elson Basic Reader V. W. H. Elson and W. S. Gray. Scott, Foresman, 1931.
- Reading and Living, Book I. H. C. Hill, R. L. Lyman, and N. E. Moore. Scribner's, 1930.
- Builders of Our Country. G. Southworth. Appleton, 1922.
- Too Many Bears and Other Stories. B. R. Buckingham. Ginn, 1936.
- Working Together. Edson-Laing Series. Sanborn, 1935.
- Helpful Living. C. L. Brownell, A. C. Ireland, and H. F. Giles. Rand McNally, 1935.
- Work Play Book V. (*Pleasant Lands*). A. I. Gates and J. Y. Ayer. Macmillan, 1932.
- The World's Gifts, Book V. U. W. Leavell, E. G. Breckenridge, M. Browning, and H. Follis. American Book, 1936.
- Book Adventures. R. L. Hardy and E. Turpin. Newson, 1929.
- Atlantic Readers, Book II. (*High and Far*). Randall J. Condon. Little, Brown, 1928.
- Pathway to Reading (Fifth). B. B. Coleman, W. Uhl and J. F. Hosic. Silver, Burdett, 1926.
- Adventures in Reading (Fifth). E. F. Smith, O. Lowe and I. S. Simpson. Doubleday, Doran, 1928.
- Storyland Book V. L. W. Rader, M. Free and H. T. Treadwell. Row Peterson, 1930.
- Nature and Science Readers V. E. M. Patch and H. E. Howe. Macmillan, 1934.
- Thought Study Readers V. P. R. Spencer, R. Gans and L. D. Fritschler. Lyons & Carnahan, 1929.
- The New Path to Reading V. A. D. Cordts. Ginn, 1932.
- Learning About Our World (Pathways in Science). G. S. Craig and M. G. Condry. Ginn, 1932.
- The Birth and Growth of Our Nation. N. G. Clark and W. F. Gordy. Scribner's, 1933.

GRADE VI

- The Lincoln Readers, Sixth. Isobel Davidson and Charles J. Anderson. Laurel, 1928.
- Reading to Learn, Book I. G. A. Yoakam, W. C. Bagley and P. A. Knowlton. Macmillan, 1935.
- The Masquerade and Other Stories. B. R. Buckingham. Ginn, 1934.
- Golden Leaves. A. I. Gates and J. Y. Ayer. Macmillan, 1932.
- Winning Our Way, Book VI. U. W. Leavell, E. G. Breckenridge, M. Browning and H. Follis. American Book, 1936.
- Reading and Living (Middle Grades). H. C. Hill, R. L. Lyman and N. E. Moore. Scribner's, 1930.
- Book World. P. L. Hardy and E. Turpin. Newson, 1929.
- Atlantic Readers, Book III (*The Wonderful Tune*). Randall J. Condon. Little, Brown, 1928.
- The Pathway to Reading, Sixth. B. B. Coleman, W. Uhl, J. F. Hosic and E. Howard. Silver, Burdett, 1926.
- Elson Basic Readers, VI. W. H. Elson and W. S. Gray. Scott, Foresman, 1931.
- Adventures in Reading, VI. E. E. Smith, O. Lowe and I. S. Simpson. Doubleday, Doran, 1928.
- Nature and Science Readers, VI. E. M. Patch and H. E. Howe. Macmillan, 1934.
- Thought Study Readers, Book VI. P. R. Spencer, R. Gans and L. D. Fritschler. Lyons & Carnahan, 1930.
- Everyday Classics, VI. F. T. Baker and A. H. Thorndike. Macmillan, 1928.
- How the World Is Clothed. F. G. Carpenter. American Book, 1929.
- Builders of Our Country, Book II. G. Southworth. Appleton, 1922.
- Our Earth and Its Story (Pathways in Science). G. S. Craig and G. N. Johnson. Ginn, 1932.
- Children's Own Readers, VI. M. E. Pennell and A. M. Cusack. Ginn, 1929.

In counting the words in these books, only those words were recorded which did not appear on the Gates Primary List. Words were included in the list at each grade level which appeared in seven or more books. Words appearing on the lower level lists were, of course, not included in the later lists. It seemed more desirable to use a basis of one or more appearances in each of seven books than

to use a total frequency count, since a single book might use a word so frequently that it would be weighted incorrectly in the final list. The size of a word list is, of course, determined by the criterion which is used for including the word in the list. For the purposes of the authors it seemed desirable to have lists of from 500 to 700 words at each of the grade levels. The criterion of appearance in at least seven of the books at the grade level appeared to be the one which produced

the most satisfactory word groups. This basis for selection of words yielded 691 words in the fourth grade list, 525 words in the fifth grade list, and 849 words in the sixth grade list. While it would have been desirable to have an increase in the number of words in each grade rather than the marked dropping off in the total number of words for grade five, it seemed best for various reasons not to change the basis for word selection for an individual grade.

SELECTED VOCABULARY

GRADE IV

	Thorndike	Buckingham Dolch		Thorndike	Buckingham Dolch		Thorndike	Buckingham Dolch		Thorndike	Buckingham Dolch		Thorndike	Buckingham Dolch
A			awe	4a	5	brace	4b	2	charge	1b	3	cramp	8	3
abide	4a	6	awl	17	6	bracket	9	6	charter	4b	5	crank	8	KU
ablaze	17	—				bravery	5a	8	cheat	4a	2	crate	7	3
abode	4a	7	B			bray	9	3	chef	18	KU	credit	3a	4
absent	3a	*KU	bacon	4a	KU	breathe	2a	6	chest	2b	KU	creep	2b	2
abuse	3b	6	badge	6	KU	bribe	5b	—	chew	6	KU	crest	4a	5
acre	2b	5	balcony	10	4	brief	2b	4	chief	1b	KU	crew	2a	5
action	2a	3	balk	9	5	brilliant	4a	4	chilly	8	4	crude	6	7
actor	5a	3	banister	18	5	brisk	5a	—	choir	4b	5	crust	4a	3
addition	2b	2	banquet	3b	5	broad	1b	3	chorus	7	4	curate	11	—
adopt	3a	—	bargain	3a	4	bureau	3b	KU	chuckle	6	8	custard	9	5
adore	4a	6	barren	3b	5	bustle	7	7	click	10	2			
adventure	3b	5	baste	10	3				cling	5a	2	D		
advertise	5a	6	beacon	10	2	C			clutch	5a	5	dagger	6	5
agent	4b	4	behave	4a	3	cab	6	KU	coach	2b	3	daily	2b	2
agree	2a	4	bellows	17	3	cabinet	4b	KU	coax	8	5	dainty	4b	3
airship	17	2	bewilder	7	7	cactus	10	8	combine	3a	6	damage	3b	4
alien	7	6	blade	2b	2	calk	16	—	comical	10	6	damp	3b	2
almond	7	5	blast	3a	2	calm	2b	5	commence	3b	5	darn	6	KU
alter	3b	5	bleach	6	6	cancel	8	5	compound	5b	2	dazzle	5a	7
alternate	6	6	blessed	1b	KU	canoe	4b	KU	conceal	3a	6	deal	1b	3
anger	2	4	blinds	—	KU	canopy	9	6	concert	4a	5	decide	1b	3
annoy	5b	—	blinker	—	2	capable	3b	5	congress	2b	4	declare	2a	4
antelope	13	6	blister	6	7	carcass	8	—	consume	4a	7	deface	9	7
appetite	3b	4	blizzard	11	4	cargo	4b	3	content	2a	4	defeat	3b	5
appoint	2a	5	blood	1b	KU	carver	13	—	continue	1b	4	defend	2a	5
arch	2b	6	bluff	5a	4	cash	3b	2	contrary	3a	3	delight	1b	2
arctic	5b	—	blunt	4b	—	cashier	6	5	control	2b	3	dent	13	2
army	1b	2	bolt	3a	5	cast	2a	2	coral	5b	5	depart	2a	5
arrest	4a	KU	bomb	9	5	central	2b	3	couch	3a	KU	deposit	3b	4
artist	3b	3	boost	13	7	cereal	8	2	council	2b	4	desire	1b	4
attire	4b	7	bore	2b	3	challenge	6	5	coupon	11	5	dessert	7	6
attract	4a	6	boss	6	KU	chamber	2a	4	courage	2b	4	difficult	2a	5
avoid	2b	4	bound	2a	2	chapel	3a	6	cove	9	5	dike	12	2

* Kindergarten Union.

	Thorndike	Buckingham Dolch		Thorndike	Buckingham Dolch		Thorndike	Buckingham Dolch		Thorndike	Buckingham Dolch		Thorndike	Buckingham Dolch
dilute	11	8	fade(less)	2b	2	glide	3b	2	honor	1b	2	kennel	8	6
direct	1b	3	failure	5a	5	glimpse	5a	8	hoof	3a	2	kerosine	6	5
discuss	4a	6	faith	2a	3	globe	3a	3	hook	2b	KU	keyboard	15	—
disease	2b	4	false	2b	KU	gloomy	5a	4	horrible	3b	6	kidnap	12	4
dismal	4b	4	falsehood	4b	4	glory	2a	3	hostile	5b	8	kiln	13	—
dismiss	3b	4	famous	1b	3	glossy	8	5	hovel	5a	5	kimono	12	6
dispatch	7	6	faucet	10	KU	glue	5b	KU	human	2a	4	kindle	4a	4
distance	1b	4	female	3a	4	glutton	12	8	hustle	7	6	kindling	—	7
distress	3a	4	fencing	—	—	gnash	10	—	hysterics	11	8	kink	19	—
district	2b	3	fender	12	4	governor	2a	4				knight	2a	KU
ditch	3a	KU	ferocious	11	7	gown	2b	KU	I					
dose	7	2	ferry	5a	KU	grab	8	KU	iceberg	9	2	L		
drain	2b	5	fever	2b	3	grade	2b	KU	ideal	4a	4	labor	1b	3
drift	4a	3	fibre	19	6	grammar	5a	3	idiot	5a	6	lacy	—	—
drill	2b	KU	fidget	14	—	granite	5b	4	idle	2b	4	laden	4a	3
drip	4a	2	fiery	3b	6	grant	1b	3	illness	5b	5	lame	3a	2
drug	3b	2	file	3a	2	grasp	4a	7	immense	3b	5	language	2a	2
dull	3a	2	film	5b	5	gravel	5b	4	imp	11	5	lapse	7	—
dumb	3a	2	filthy	6	5	grease	5b	2	import	3b	5	larceny	16	8
dump	8	KU	flash	2a	2	grief	2b	4	improve	2b	4	latch	5a	2
dusk	6	3	flask	9	4	groove	6	7	impure	11	8	launch	5a	5
dwelt	2b	3	flesh	2a	4	group	2b	3	infant	3b	5	laurel	4b	7
dye	4a	3	foliage	6	6	guest	2a	3	inhabit	4a	6	lawyer	3b	3
			folk	2a	2	gypsy	8	3	injure	3a	4	leak	6	2
E			fondle	16	8				inland	5a	—	lecture	4b	5
ebony	8	7	foreign	2a	3	H			inquire	3a	5	leisure	5a	6
education	3a	3	forenoon	4a	3	habit	3a	2	insect	3a	4	lemon	4a	KU
elastic	5b	5	forge	4b	5	halibut	14	6	instant	2b	5	lens	10	3
elect	2a	4	form	1a	2	halt	4a	2	intend	2a	3	leopard	8	4
electric	3a	KU	fort	2b	3	halter	7	7	introduce	3a	2	level	2a	4
elegant	4b	5	fountain	2b	KU	harbor	2b	4	itch	6	2	library	2b	KU
elevate	4b	4	frame	2a	2	hardy	4a	—	ivory	3b	4	lice	11	2
else	1b	KU	fraud	5b	8	harp	4a	2	ivy	5a	6	limb	2b	3
embark	7	8	frightful	6	5	harvest	2a	5				linger	4a	3
emblem	9	4	frigid	9	4	haste	2a	2	J			links	3b	—
embrace	3a	5	froth	11	—	hatchet	5a	KU	jail	5b	KU	liquid	3b	5
engineer	4a	KU	frown	3b	2	haughty	4a	7	jealous	3a	KU	litter	5b	2
enter	1b	3	fudge	—	5	haven	5b	8	jelly	3b	3	loan	7	3
envy	3a	6	furnace	3b	KU	heap	2b	2	jest	4a	KU	loosen	6	—
erect	2b	4	furnish	2a	3	height	1b	2	jet	4b	3	lounge	9	6
escape	1b	3	furniture	2b	KU	hem	4a	KU	jewel	5a	3	lucky	4a	3
event	2a	4				herd	2b	2	jingle	3a	3			
evergreen	7	4	G			hint	4b	3	jitney	8	4	M		
evil	2a	4	gale	4a	2	hitch	8	KU	job	—	—	machine	2a	KU
exact	2a	4	gallery	4a	6	hither	3a	7	jog	3a	KU	mackerel	11	4
examine	2b	4	gallon	5b	2	hobby	7	8	jolly	10	—	magic	3a	2
example	2a	3	gaseous	8	6	hobo	—	6	judge	4a	2	magnet	7	6
exchange	2b	2	gem	2b	2	holiday	2b	2	juice	1b	3	magnify	5a	6
expel	5b	7	generous	3a	5	holy	2a	3	junior	4a	KU	manage	2b	4
eyesight	9	5	germ	6	KU	homesick	7	5	jut	5a	2	manger	6	KU
			ghost	2b	3	homespun	10	8		6	—	maniac	15	7
F			glance	2b	3	homestead	7	8	K			manner	1b	2
fable	4a	2	gleam	4a	5	honest	2a	3	keen	3b	2	margin	5a	3
												marine	6	6

	Thorndike	Buckingham Dolch		Thorndike	Buckingham Dolch		Thorndike	Buckingham Dolch		Thorndike	Buckingham Dolch		Thorndike	Buckingham Dolch
mattress	7	KU	obtain	2a	5	quilt	5a	KU	scarce	2a	5	tank	4b	KU
mayor	3a	4	odd	2b	2	quotient	9	2	scare	3a	KU	tape	6	2
medicine	2b	KU	omit	4b	6				scarf	4a	KU	tart	6	2
meek	4a	2	orchard	2b	3	R			scatter	2a	3	tax	2a	2
megaphone	20	7	overall	9	KU	racket	12	4	scrape	3b	KU	taxicab	14	7
mellow	5a	3	owe	2a	2	rage	3a	2	scratch	3a	KU	teeming	7	—
melon	6	3	owner	2a	3	railroad	2a	KU	screw	5a	2	telegraph	4a	3
memory	2a	4	oyster	4a	4	ramble	8	—	scrub	5a	4	temper	3a	4
menu	13	5				range	2a	4	seal	2b	2	tenant	5a	5
mercy	2b	4	P			rank	2a	2	seldom	2b	4	tender	2a	2
merit	3a	4	painful	5a	—	ransom	5b	5	senior	6	4	terrify	6	4
mesh	8	—	parcel	3a	4	rapid	1b	5	sense	2a	3	test	2b	2
metal	2b	4	parent	2a	—	rare	2b	3	sensible	4b	5	thicken	7	—
midget	20	5	partner	3b	KU	rave	5a	3	separate	1b	3	thief	3a	3
migrate	7	—	paste	5b	KU	razor	6	5	serene	5a	3	thimble	6	KU
mild	2b	2	peace	1b	2	read	3b	2	serious	2b	4	thistle	4b	—
military	3a	5	peak	4b	3	recent	3a	5	service	1b	2	thrash	5a	—
millinery	10	5	pearl	2b	2	recess	3b	KU	settle	1b	2	threat	5a	8
mince	6	4	pebble	5a	3	record	2a	KU	settler	4a	5	thrill	4a	2
mineral	4b	5	pedal	11	6	recover	2b	3	shallow	3b	5	tickle	5a	4
mingle	3b	6	peddle	19	4	refuse	2a	4	shame	2a	2	tide	2b	2
minstrel	6	6	pedler	17	—	relation	3a	4	shanty	18	5	tile	4a	2
moan	4a	5	peel	5a	KU	remnant	4b	7	shark	9	2	trace	2a	KU
model	2b	5	pelt	8	8	remove	2a	4	shave	4b	3	trail	3b	2
modern	2b	3	perch	3b	2	rent	2a	2	shelve	4b	4	trash	11	2
moist	4a	3	perfect	1b	2	repair	2a	3	shield	3a	4	tread	2b	2
moment	1b	2	perfume	4a	KU	repeat	2a	4	shovel	4b	KU	trench	5a	4
monitor	12	3	period	2b	3	report	1b	2	sink	2a	KU	trespass	6	6
motion	2b	4	permanent	4a	5	rescue	3b	7	situate	3b	5	triangle	6	KU
motor	4a	KU	permit	2a	5	rib	3a	2	slice	4b	KU	trickle	8	—
motorist	14	6	pester	15	—	rifle	5b	3	snore	6	2	trinket	10	5
mount	1b	5	petal	6	5	rigid	7	—	snout	7	5	trumpeter	12	4
muscle	6	2	pilot	6	4	rinse	11	7	social	3b	6	turpentine	7	KU
muslin	6	5	pitch	3a	3	risk	4a	3	spatter	10	—	twine	4a	3
			plaster	5b	3	rob	2b	2	special	2a	4	twist	3b	3
N			plateau	5a	4	royal	2a	3	sphere	3b	4	typewriter	5b	4
nasty	10	3	pledge	3b	3	ruby	5b	5	sprawl	10	6			
nation	1b	3	plump	5a	2	rude	2b	2	stagger	4a	8	U		
national	2b	2	plural	10	5	ruin	2a	5	stake	3b	2	uncertain	4b	8
native	2a	4	poet	2a	5	rummage	12	—	stale	4b	3	understand	1b	3
natural	1b	4	poetry	4a	5	rust	3b	2	stall	3b	2	uneasy	5a	7
nature	1b	4	poke	8	KU	rut	13	2	startle	4b	8	unequal	6	8
naval	7	5	polish	3b	KU	S			stiffen	8	—	unfit	5a	4
nervous	4b	4	possible	1b	2	saint	2b	2	stingy	18	5	unfold	5a	8
nestle	6	6	powder	3a	KU	salad	5b	KU	streak	6	7	union	2a	2
noble	2a	3	prairie	5b	4	saliva	8	—	stuff	2b	KU	unite	1b	3
nonsense	5a	3	principal	2b	5	salmon	6	3	sulky	11	8	unknit	—	—
notion	3b	3	puppet	13	—	sandal	7	KU	T			unless	2a	KU
			purchase	2a	5	sank	4a	2	tab	13	2	unloosen	14	—
O			Q			satisfy	2a	4	tack	6	2	uplands	8	—
object	1b	4	quarter	1b	KU	sauce	4a	KU	talkative	15	7	upset	5a	2
observe	2a	4	quill	9	5	scale	2a	2				usual	1b	4

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A Plan for a Remedial Reading Program

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IF A REMEDIAL reading program of instruction is to be effective, certain principles and assumptions should be understood and tactfully used as guides.

An understanding of the child as a whole is necessary before remedial instruction can be effectively administered. Such an understanding is impossible without making an analysis of his reading difficulties, of his achievements, of his inherent capacity, and of his interests. A methodical procedure involves conscientious observations of the child's reactions to reading situations, careful analysis of the nature and the cause of his difficulties, making a diagnosis and stating the corrective and remedial measures which are needed. For example, a child who is retarded in reading has reading sickness. The teacher is the doctor and his first function is to examine and diagnose. The diagnosis will determine the nature of the medicine or the remedy he administers to effect a cure. After the first diagnosis the good teacher, like the good doctor, continues to diagnose—to discover further difficulties—and to administer remedies until the child is cured of the reading sickness—until more favorable attitudes are established, old interfering habits are corrected, and better habits are formed.

It is necessary to enlist the child's co-operation by arousing in him an intense desire and a determination to improve his reading efficiency and by building confidence in his ability to become a better reader. Without a feeling of personal responsibility and a sincere effort on the

part of the child, the best methods and material will fail to obtain desirable results. The children should be made thoroughly aware of the degree and the nature of their deficiencies and very conscious of the need for correcting futile and inappropriate reading habits. At the same time they should be convinced that with the teacher's guidance and a sincere effort on their part they can become good readers. Securing the child's co-operation and resolution to become a better reader is the first, and the major teaching problem.

The teacher's desire to lead the children to correct their reading deficiencies, to help them to establish favorable attitudes toward reading, and to aid them to form more effective reading habits, is a determining factor in the outcome of instruction. Further the teacher should firmly believe that the child can learn to read reasonably well if the right approach, the right technique, and the right materials are administered in a stimulating teaching situation. Research has established the fact that children who have a reading handicap can learn to read, and that children who are below the normal in intelligence can improve their reading ability.

For the early remedial instruction use of simple, very interesting materials, free from difficulties of word recognition and comprehension, and relating to some genuine interest of the child's, is necessary to establish a reading attitude. Success is the motivator of sustained interest and effort. Therefore, providing for the first few

periods of instruction, an opportunity for a series of successful and satisfying reading experiences will tend to reconstruct the child's confidence in his ability to enjoy reading. The satisfaction derived from successful reading experiences is the foundation on which to begin to do corrective reading of more difficult and possibly less appealing material. This psychological law of effect is the basis for beginning remedial reading instruction.

A constant effort to master all reading situations and to recognize the need for mastering reading problems is a motivating factor in remedial instruction. This involves convincing the children that the extent to which they can enjoy reading for pleasure and the extent to which they can read creditably the material assigned and recommended in the school studies depends upon knowing how to read for a variety of purposes at appropriate rates. They must know how to use the silent reading skills to read interesting books and stories for pleasure; and recognize that efficiency in independent reading depends upon an extensive reading vocabulary and knowing how to determine the meaning of unfamiliar words.

Avoiding monotony in the program of instruction helps to sustain the children's attention and interest. The nature of the class periods should be varied. For example, have such alternating periods as the following: group reading (comprehension and speed) in a basic text, individual assignments, practice exercises in the fundamentals of comprehensive silent reading, practice in oral technique and audience reading, current reading, free reading.

Actual reading of interesting material is the most productive means of correcting and improving reading habits. For example, the best means of increasing the span of recognition is motivated reading of interesting material.

Attack the basic deficiency first. A child

whose major reading difficulty is word recognition and meaning cannot advance in any form of reading until he overcomes the handicap. A child must be trained to associate, in the reading process, the ideas which a word or a phrase symbolizes with the preceding and succeeding symbols and with his own experiences before he can understand and remember what he reads. A child must be capable of understanding what he reads before he can enjoy studying and reading extensively.

Provision for remedial reading instruction is an administrative function of any school in which children have not, in the regular process of reading instruction, acquired reading habits effective for study and for gaining general information and pleasure. Every child, in this democratic land of free education, has a right to the kind and the amount of instruction which is necessary to enable him to read his native language as comprehendingly as is possible for him to learn to read. Therefore the administrators are obligated to provide a means of fulfilling the primary function of the elementary school—training in reading ability—the tool of learning in all subjects.

The important problem of the administrator and the teacher is to be ever conscious of discovering to what extent the children, with whose education they are entrusted, have mastered reading skill—the tool of learning.

Preliminary to a remedial instruction program, all children in the school should be given standardized general achievement tests to determine the level of achievement, followed by a standardized survey silent reading test to identify those who are below the grade norm in reading ability. Pupils who are below the grade norm should then be given a standardized silent test that is more analytical, to determine the nature of the silent reading deficiency, and if possible, one of Gray's standardized oral reading tests to

discover the mechanical difficulties. The reading tests should be followed by a standardized intelligence test, preferably a non-language test, to determine if low mentality is the cause, then by visual and health examination to discover physiological causes.

Although such a testing program as is described above is desirable, and was used by some of the schools having teachers in the clinic course at De Paul University, most of the schools could not afford either to provide or to give so many tests which are expensive of both money and time. Therefore it was necessary to recommend additional plans, plans which could be adapted to conditions within the various schools. One plan involved giving a grade placement test, such as the New Stanford Reading Achievement (World Book Co.), or The Metropolitan Reading Achievement (World Book Co.); followed by an analytical silent reading test, such as the Gates Silent Reading (Teacher's College Bureau of Publications); then Gray's Standardized Oral Reading Check Test (Public School Publishing Co.). Another plan involved giving one silent reading test, one that is analytical in nature and has a grade equivalent scale, such as the Sangren-Woody Silent Reading Test (The World Book Co.). Finally schools that could not afford a standardized reading test were advised to use informal tests: to observe carefully the child's reading difficulties in regular class room reading situations, and to determine at what level a child could read with understanding and ease by sample selections in a graded series of readers. Informal tests, if constructed and administered by a teacher who understands the nature of reading abilities, are an excellent means of determining the nature of reading deficiencies. Often they are more useful than standardized tests.

A brief questionnaire, which might be

either oral or written, was used to identify attitudes, traits, and conditions which might be causes of reading deficiencies, and to determine interests which might serve as the basis for assigning reading material. The following questions were included:

- What do you do when you are not in school?
- What games do you like to play?
- Do you enjoy reading books and magazines when you are not working?
- What kind of books do you like to read?
- Name some books you have read this past year.
- Check the book you like best.
- Do you get the books you read at home? At school? At the public library? From a friend?
- What kind of books and stories would you like to read?
- What magazines do you read? Do you get these magazines at home?
- Do you like to read newspapers? Why?
- Do you like to have some one read to you? Who reads to you?
- Does anybody encourage you to read during your leisure time? Who?
- Would you like to have books of your own? What kind?
- What school work do you like best?
- Do you like to write or talk about what you study or do?
- What do you want to be?

Responses to the foregoing questions furnished the following information concerning the pupil:

- Is his attitude favorable?
- Do his interests and activities seem to interfere with his school progress?
- Is his home influence favorable?
- If his attitude toward reading is unfavorable, do his comments lead you to believe reading deficiency is the cause?
- What subject matter would he likely be interested in reading?

A careful diagnosis of a pupil's deficiency is necessary before instruction can be effectively administered. The test results and the facts obtained through observation should be interpreted to determine the degree, the nature, and the cause of the reading deficiency. Thus these recommendations were made to the teachers:

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Challenging the Learner*

REPORT OF THE SUMMER SESSION READING CLINIC†

State Normal School, Oswego, New York

WHAT IS A retarded reader? is a pertinent question which needs definition before any investigation can be critically appraised. It is common knowledge that many students of retardation have appeared to report conflicting results because varying populations have been studied. A survey of research reports indicates that the crucial aspects of retardation have not yet been studied. For example, a child in the third grade with average third grade reading ability may be retarded four years because he has the mental and physiological capacity to achieve seventh grade ability. To administer a standardized reading test and study those who fall in the lowest twenty per cent produces data which are only about twenty per cent correct because eighty per cent of the retarded readers may be above the lowest twenty per cent on such a test. For this study the individual's reading age was subtracted from his mental age (Binet) in order to arrive at the amount of retardation.

THE READING CLINIC

The question has been asked frequently, "What is a reading clinic?" Briefly, our own clinic consists of a room where all available instruments and materials have been collected for the analysis and correction of reading difficulties. Since this clinic is largely a psycho-educational laboratory, tests have been developed for screening out, or detecting, cases which should be referred to specialists for a type of service falling outside our province. Following this differentiation of service,

steps are taken to analyze the pedagogical and psychological aspects of the problem. Finally, the results of the analysis in the reading clinic, and the findings of the specialists, are studied together in order to arrive at an integrated picture of the individual's strengths and weaknesses, the educational implications of the specialist's findings giving important clues to the mechanical specifications of the remedial reading materials and to the general nature of the corrective or re-conditioning program. It will be noted, therefore, that the reading clinic is merely a co-ordinating and co-operating agency concerned with the developmental needs of an individual deficient in reading and study habits.¹

From the cases referred to the clinic by school people, doctors, and directors of orphanages, thirty-four were accepted at a nominal fee for the six weeks' summer session. Most of the children were accompanied by their parents; the remainder were cared for in one private home. The supervisory staff for the reading clinic included the director of the reading clinic, the director of the psychological clinic, two supervisors of remedial instruction, one psychologist, one assistant, three demonstration teachers, forty-one tutors, and one consultant from the speech department. In addition to this staff, ophthalmologists, optometrists, otologists, gland specialists, and the family physicians co-operated with considerable enthusiasm for the project.

* The theme for the work of the third annual summer session reading clinic which was conducted for the benefit of about two hundred teachers and thirty-four children at the State Normal School, Oswego, New York in 1937.

† Prepared by E. A. Betts, Director of Reading Clinic, Pennsylvania State College, Helen E. Donnelly, Lincoln School, Brookline, Massachusetts; Sadie Aaron, Psychologist, Board of Education, Houston, Texas; and Mabel Everett, Board of Education, Shaker Heights, Ohio.
¹ Betts, E. A. "To the Rescue of the Learner." *Visual Digest*, 1, 2, September, 1937.

For pre-requisites the students were encouraged to take background courses in the methodology of reading, reading problems at the secondary school level, phonetics (a speech course), speech correction, the enriched school curriculum, and mental and social adjustments. In addition to these courses, a seminar on reading problems was conducted daily. As a part of the reading disability course the students organized, prepared, and edited a mimeographed booklet on "The Correction of Common Difficulties in Reading."

Tutors worked with each pupil during scheduled periods when the tutors were free from classes and when the pupils could be excused from the regular classroom activities in the Campus Elementary School. Since the tutors constituted a large section of the class in reading disabilities, the administration of the remedial work was not a major problem. General meetings of the tutorial staff were held once each week, the remainder of the supervision being given in personal conferences. The standardized tests were administered in the reading clinic, while the remedial instruction was conducted in a special room under the constant supervision of the clinic staff. Thirty-four stations were established in the remedial room and the tutors were encouraged to co-operate with the case in making each station as attractive and as educationally valuable as possible. By keeping the remedial instruction in the same room, the administration of the program was greatly simplified, materials were usually at hand, tutor and case needs were cared for with a minimum of administrative detail, and a follow-up on the tests was more nearly insured.

During the first three days of the summer session, the time was spent largely in determining the general level of reading achievements, isolating specific reading difficulties, detecting the points at

which integration had broken down, detecting visual and auditory handicaps, and consulting the family physicians or specialists. Standardized educational and psychological tests were used to determine the amount of retardation or acceleration in terms of individual capacity for achievement; tests of vision and hearing were administered in order to refer cases for help and to study the educational implications of physical defects so as to "side step" them; an isolated word recognition test was used to identify systematic and random errors of word perception; and a well graded series of readers (new to each case) was used to make a personal inventory of the strengths and weaknesses of each case. In addition, informal tests were used to measure small increments of growth in order to cause the pupil to be aware of his success.

Standardized tests were used largely to provide objective evidence for the pre- and final-testings. Experience in the clinic has indicated that the standardized tests used place the pupil at a higher level of general achievement than can be justified. In view of this, the data were supplemented with observations and findings secured by having the pupil read orally at sight and read orally after being guided with leading questions through a silent study of short units in a series of readers. From such a procedure, at least three findings were secured: First, the general level of reading was determined; second, the amount of "under-cutting" (or the level of material which offered the fewest mechanical obstacles) was arrived at; and third, meaning and mechanical difficulties were detected quickly.

The following types of informal appraisals were made: (1) Reading from a well graded series of readers. (2) Re-reading the standardized pre-tests to determine possible causes for incorrect responses and to check on accuracy and depth of comprehension. (3) Checking

with samplings from spelling books in order to determine level of spelling ability. (4) Checking with samplings of words from each reader in the basal series in order to study word perception habits. (5) Checking on words taught by means of teacher prepared paragraphs. (6) Checking on accuracy and depth of comprehension by oral and written activities. (7) Checking rate of comprehension by means of graphs and charts. (8) Discussions and conversations which tap and contribute to the individual's special interests and general background of information. (9) The writing of answers in short sentences in response to the tutor's leading question to indicate the child's ability to grasp the central thought of a paragraph. (10) Conferences with parents in order better to understand the child's interests, cultural background, and habits.

FINDINGS

Eleven girls and twenty-three boys made up the group of retarded cases in reading which were tutored. The fact that in this group the percentage of boys (68%) is a little better than three times the percentage of girls (22%) is in agreement with the usual findings of research workers that the majority of remedial reading cases are boys.

The Stanford-Binet individual intelligence test was given during July to each one in the remedial reading group. All the Binet tests with one exception were administered by the same examiner. For sixteen out of thirty-four cases, the chronological ages exceeded the corresponding mental ages by approximately twelve months or more. Nine of these cases showed mental retardation of approximately two years or more. The data immediately suggest the possibility that some of these pupils may be attempting work on a level beyond their mental maturity.

Table I presents the distribution of

chronological and mental ages of these cases upon entrance to first grade. It is interesting to note that only five (15%) of these pupils had a mental age of six years five months or more upon entrance to first grade.

TABLE I
DISTRIBUTION OF CHRONOLOGICAL AGES AND
ESTIMATED MENTAL AGES* ON ENTRANCE
TO FIRST GRADE

	Chronological Age	Estimated Mental Age
7-5 to 7-7		1
7-2 to 7-4	1	0
6-11 to 7-1	0	0
6-8 to 6-10	0	2
6-5 to 6-7	3	2
6-2 to 6-4	6	2
5-11 to 6-1	6	2
5-8 to 5-10	10	6
5-5 to 5-7	4	7
5-2 to 5-4	1	3
4-11 to 5-1	1	1
4-8 to 4-10	1	3
4-5 to 4-7	0	2
4-2 to 4-4	0	1
3-11 to 4-1	0	0
3-8 to 3-10	0	1
	33	33
Insufficient Data	1	1
Total	34	34

* Stanford-Binet

Are these boys and girls who present reading difficulties of normal intelligence? According to the Terman classification, thirteen (38%) of the thirty-four cases were dull or borderline in intelligence while the remaining twenty-one (62%) were normal or above. These findings were in fairly close agreement with the results secured by other investigators to the effect that children with reading difficulties are not necessarily retarded mentally. The reader is cautioned that these cases do not represent a random selection.

At the beginning of the six weeks tutoring period, the reading level of each child was secured by means of the New Stanford Achievement and the Gates

Reading Tests. The primary and advanced forms (Form W, New Stanford, and Form I, Gates) were used in the appropriate grades. The median reading age for each pupil was then calculated by combining the results secured on the two reading tests in the New Stanford Achievement (Paragraph and Word Meaning) with the three parts of the Gates Primary (Types I, II, and III) or the Gates Silent Reading (Types A, B, C, and D). The median reading age thus calculated is probably weighted too heavily by the results secured on the Gates tests, especially in those few cases where there was a great discrepancy between the two reading test results.

In order to determine the extent of the reading retardation, the median reading age was compared with the mental age (Binet) of each child. Twenty-six of the thirty-four cases showed retardation ranging from six to thirty months. On the standardized tests, eight cases had mental ages in excess of their reading ages.

It is interesting to note that out of the eight cases which show median reading ages in excess of the respective mental ages, seven are girls, and with two exceptions, their I. Q.'s were below 100.

Retardation or acceleration in months in terms of Binet mental ages and the median reading ages are indicated in Table II.

It should be further noted that with two exceptions the I. Q.'s are all under 100. This suggests that although they are working to capacity, they are failing.

Seventeen pupils had not been failed, while the remaining sixteen (definite data could not be secured on the thirty-fourth case) made forty-five repetitions of grades. In only two cases were grades "skipped." The repeating of grades apparently did not solve the reading problems of these cases.

Twenty-six (or 76%) of the thirty-four cases evidenced some type of func-

tional difficulty (or failed the tests); while eight were normal; thirteen (or 38%) failed distance fusion, and eleven (or 32%) failed reading distance fusion. No case evidenced a vertical imbalance.

The reader is cautioned that reading may cause inefficient visual performance and that visual handicaps *may* impede

TABLE II
RETARDATION AND ACCELERATION IN READING

Reading Retardation Months	Frequency
31-35	2
26-30	0
21-25	6
16-20	3
11-15	8
6-10	5
1- 5	2
Total	26
Reading Acceleration Months	Frequency
1- 5	2
6-10	2
11-15	3
31-35	1
Total	8

reading. A high incidence of visual inefficiency, lack of established dominance, and several other items not yet thoroughly explored may characterize certain groups of retarded readers, but those items may not cause, in every instance, the reading deficiency. For example, it may be found that a lack of motor control makes some of the cases poor at roller skating, but one could not claim that poor roller skating ability caused the reading deficiency. On the other hand, it does appear reasonable to assume that comfortable and efficient seeing is essential to sustained reading and that certain types of visual handicaps may be "side-stepped" by selecting material with more nearly adequate mechanical specifications. Furthermore, the capacity of the individual for various types of compensations appears to be a factor worth serious study.

CORRECTIVE PROCEDURES

In general, the corrective procedures were based upon the specific findings from the formal and informal testing. For example, those who made random errors in word perception were given systematic preparation in order to make them versatile in word attack and in using a number of clues for identification of the form and meaning of the words, while those who made systematic errors were very quickly helped to complete their control over word perception techniques. In other instances, cases were helped over several errors by purposeful reading, by developing control over word perception techniques, by a modified kinaesthetic technique, or by some other procedure—depending upon the case needs as revealed by the analysis. An important aspect of the remedial program for some cases was the selection of materials with appropriate mechanical specifications for side-stepping visual difficulties. In short, the procedures used were varied to suit the needs and interests of the learners.

Change of Pupil Attitude. The major problem in the corrective program was to change the attitudes of the cases toward reading. These cases represented a wide variety of poor attitudes, typical of children maladjusted because of their failure in reading. Among the group there were those who worked under severe nervous tension, and those who evidenced definite attitudes of refusal or withdrawal. There were those who were convinced they could not read, those who assumed bold fronts with the typical swaggering, "Just try to teach me to read" attitude, and the less colorful but equally problematic cases with submissive and withdrawal attitudes toward books and reading in general. It was apparent that these destructive attitudes had been built up through years of failure.

Perhaps the greatest success of the individual remedial work lay in the de-

cided change of attitude, well symbolized by the eight-year-old boy who changed from, "What time is it any way? Aren't we *through* yet?" to "What? Are we through? Are we going already? Can't we just finish this part, *please*?"

Through detailed study of the child's interests and abilities, and through careful selection of materials at the proper level of reading for each individual, the tutors were successful in building up good attitudes toward reading. Evidences were shown, too, that the youngsters who received this work were better adjusted socially.

Vocabulary. Like other retarded readers, our summer school cases showed very limited meaning vocabularies. There were individuals who pronounced words accurately but had little or no understanding of the meaning of many common words, due, perhaps, to lack of experience or inadequate concepts.

Our primary step, then, in working with these cases was to build concepts and to train the child to draw as many relationships and associations for each word as possible.

Among the more specific techniques used in developing vocabulary were the following:

Use of context was emphasized in the first presentation of words. New vocabulary was seldom presented in isolation since this seemed to defeat the purpose of our entire program of presenting words in meaningful situations.

On the upper levels, context activities were supplemented by dictionary use in order to re-enforce meaning and to offer the child an opportunity to use the new word later in original sentences. Using new vocabulary in original oral or written sentences or stories proved to be very helpful. An attempt was made to make the pupils conscious of the fact that words have more than one meaning and they were given prepared exercises to develop

their ability to select the correct meaning of certain words for particular situations.

Many word enrichment exercises were used. Among these were related-word exercises which offered the pupil an opportunity to make many associations for each word. Synonym and antonym exercises were used with good results. Exercises in which words or phrases were classified under major headings were found of value not only in vocabulary building but also for giving worthwhile training in the organization of ideas. Word addition exercises in which the child was called upon to add words related in some way gradually developed in him an independence in seeing relationships and associations between words.

The keeping of inventory lists of new vocabulary proved to be of definite value. Through these lists an accurate account of words mastered was kept. This may seem to be a rather mechanical process, but when used as a basis for inventory paragraphs it proved to be worthwhile. The inventory paragraphs were built by the tutor and based on this review vocabulary. Through keeping these lists, too, the child was motivated by watching his list of words grow.

On lower levels many picture dictionaries were built. One case—a mature child reading very simple material—found it of great interest to prepare an index box of new words, rather than to build a comparatively “childish” picture dictionary. One very retarded pupil with a particular interest in carpentry found it enjoyable to put a new shingle on his cardboard house each time that a new word was mastered. During the summer session, it was found necessary to construct a garage to use the extra shingles. While devices of this type are sometimes criticized, it is believed that in individual work they do have a value. Other graphic representations of word mastery were

kept and posted on the remedial room bulletin board.

When other methods of word presentation were not particularly successful, a modified form of the kinaesthetic method of word presentation was used. In two very retarded cases this visual-motor method was used with creditable results.

Exercises in which the child selected words which described a certain character or event and later suggested other words which might have been substituted for them, proved valuable in the building of vocabulary.

Comprehension. The majority of the summer school cases showed the need for establishment of better attitudes of reading for meaning. There were several “word-callers” among the group, and those who read words orally with expression, but who could neither recall the important items of the story nor draw any conclusions from the reading material. Then there were those who read aimlessly, saying words in an expressionless manner without any understanding of vocabulary or general underlying ideas.

The procedures which seemed to give worthwhile results are outlined briefly:

An attempt was made always to tie the material to be read into the child's experience background. This was done largely by informal discussion between the tutor and the child.

Definite purposes were set up for each lesson. The child participated in the selection of the important problems for each reading. At first, many of the cases had to be led through the lesson by guiding questions.

The materials used in the program of development of comprehension presented as few vocabulary difficulties as possible, and were, in general, very colorful. In certain cases, when the more mature child was reading at pre-primer level it was necessary to build materials

of high interest, but with a very limited vocabulary burden.

An exercise which proved to be of exceptional value and interest to the child was that in which he read to prepare a series of questions to ask the tutor about the story. It is obvious that this type of exercise is stimulating to the child, for he is always alert to select items important enough to use as check-up material with his tutor.

Definite factual questions on material read preceded the introduction of judgment questions. After fairly adequate mechanical habits were developed, thought or judgment questions were used. Questions of this type demanded interpretation and evaluation. They were of value because the pupil not only read to understand the direct statements in the material, but also to relate the meaning of his other knowledge of experience. Much oral discussion between the tutor and the child was carried on in the planning of these thought or judgment questions.

Many of the common methods of checking for comprehension were employed, including such activities as checking for detail through multiple choice questions, matching items, and a limited use of true-false questions. Varied types of exercises in selecting the central idea were used by the different tutors.

Exercises in summary writing proved to be of value on certain levels. On the upper levels it was found rather difficult to motivate the preparation of written summaries. One tutor motivated the exercise by asking the child to prepare a summary to be placed on the remedial room bulletin board. Other children were to read this summary in order that they might discover whether or not the book would be of interest for them. Well-motivated oral summaries were found to be of value on all levels.

Exercises in preparing different endings

for stories were found to be of high interest to the cases. They enjoyed predicting and anticipating various outcomes for stories. A variation of this technique was the preparation of several different endings for a story in the book. These endings were prepared by the tutor in typewritten form. After the child had read to a certain point in the story, he transferred his interest to the typewritten material in order to select the best ending. Work of this nature was found to be of value in teaching the child to evaluate material read.

Certain informal types of comprehension checks were found to have valuable concomitants in stimulating the child's interest and teaching him to read with a definite purpose in mind. Among the informal types of comprehension checks used were arranging a set of pictures of important events in a story in correct sequence, and the illustration of events or characters in the story. These exercises were used discriminately, however. The tutors realized that exercises of this nature were time-consuming and did not offer the child the same opportunity to see the words in thought units.

Rate of Comprehension. Many of the cases receiving tutoring during the summer session showed deficiencies in rate. In the corrective work with those cases speed was never emphasized *per se*, but it was attacked through development of *speed of comprehension*.

The procedures which proved valuable in the work with these cases are outlined briefly:

The fundamental step in this problem was the creating of desirable attitudes. This was accomplished largely through building a feeling of success for the child by providing challenging materials. Materials selected for use with these cases were at or below the child's level of reading. The levels were ascertained

through informal testing and observation. It was found that the selection of easy and interesting material was one of the most vital steps in the attempt to bring about a feeling of success and fluency in reading.

Silent reading always preceded oral reading (except when oral reading at sight was done for inventory purposes), in order adequately to prepare the child for his reading. It was shown that the plan of oral reading after silent reading was of value in aiding the child to anticipate meaning, to interpret the author's thoughts, to overcome vocabulary difficulties, and to interpret punctuation.

The reading was made as purposeful as possible. The child, through discussion with his tutor, participated in the setting up of definite aims for the reading. Activities of this type tended to avoid slow, aimless and careless reading.

The development of versatility of word perception and word attack was one of the most successful procedures in the development of rate of comprehension.

Certain mechanical habits, such as finger pointing, lip movement, and vocalization were eliminated at once. This was accomplished largely through basing the remedial work on easy and interesting material and making the child conscious of the effect that habits of this type have upon his reading.

Faulty habits of oral reading were common. Many of these difficulties were due not necessarily to vocabulary difficulties, but to lack of ability to phrase properly and to note punctuation. In the correction of deficiencies of this nature, it was found valuable to have the tutor serve as a model for the child. The child was then instructed in phrasing of reading material by underlining or vertical marking of phrases on typewritten materials. After the work with typewritten material, transfer was made immediately to the book.

In silent reading activities many exercises were prepared in which the material was typewritten entirely in phrases or thought units. Another modification of this type of exercise (which was used with great success with one case) was the preparation of a short story in phrases which were printed or typed upon adding machine paper. This long "strip" or "ribbon" story was drawn through an oak tag slot arrangement, serving as an improvised Metron-O-Scope. The case showed remarkable interest in this technique.

Exercises in concentration were found of particular worth in many cases. Among these exercises were those of beginning an assigned reading without delay, reading rapidly to locate a specific point, and reading with specific purposes in mind.

The use of skimming exercises resulted in significant gains in rate with certain cases. These exercises were those in which the child skimmed to locate a phrase or sentence read by the tutor or to locate the answer to a question set up by the tutor. Another type of exercise in skimming was used in which unimportant words were omitted. Through the use of exercises of this type the child was trained to skim rapidly over unimportant words and to note only those of importance to the general meaning.

Individual work with the Metron-O-Scope aided a few of the cases in making significant gains in rate of comprehension.

The children were made conscious of their progress in rate of comprehension by keeping weekly graphs. These graphs were based on rate of comprehension in reading the same types of materials with similar vocabulary burdens. Some exercises in reading under time pressure were employed but they were used judiciously, being based largely on very simple material.

Exercises in which the pupil located a

phrase, pronounced by the tutor, among a group of phrases very similar in general configuration were of value for developing habits of quick perception. Many multiple choice exercises were used in which the child found the correct responses in phrase form rather than in an isolated word form. It is believed that these were of particular value since the child was trained in seeing the word in a thought unit rather than as one unit.

Table III shows the summer session gains made by the cases.

TABLE III
GAINS IN READING AGES

Months Gained	No. of Cases	I.Q. of Cases
43	1	92
25	1	89
19	1	77
15	3	85, 98, 92
11	2	80, 130
9	2	82 ¹
8	1	77
7	2	103, 100
6	2	99, 89
5	6	94, 84, 72, 105, 90 ²
4	3	88, 94, 116
3	6	96, 87, 91, 102, 101, 108
2	2	82, 98
Insufficient data	2	78, 117
Total	34	

¹ This case was admitted to the reading clinic for the last three weeks only.

² Two cases making a gain of five months, had I.Q.'s of 90.

Gains in reading age ranged from two to forty-three months. The amount of gain varied with the learning rate of the case, the extent to which the limits of the mental functions have been approached, the quality of the instruction, social adjustments, and kindred factors.

LIMITATIONS

Since this article is largely a description of the work done in one type of reading clinic, several limitations of the study should be indicated.

Complete data were secured for only thirty-four cases. Not all of the cases

were retarded in reading, although all did evidence background deficiencies. In terms of their grade placement, the cases were retarded.

In some instances the tests were administered by students whose background for the interpretation of the tests might be questioned. Because of the time element, certain available tests were not administered. In other words, many diagnostic clues undoubtedly went by default. In addition, the educational implications of the health, psychological, and pedagogical tests were not fully realized upon.

The emotional well-being of the 1937 cases was below that of the cases reported previously. The feeling of hopelessness evidenced by most of the cases upon admission to the clinic probably contributed significantly to the low scores on the pre-tests. After the development of attitudes of approach rather than withdrawal, the pupils probably were more successful on the final tests.

It was somewhat of a paradoxical situation to have the tutors taking the course in reading disabilities at the same time they were tutoring. It is obvious that the laboratory work should have followed the course. Although this situation created many "felt needs" on the part of the student-teachers, they were handicapped with an undesirably heavy schedule and with the need for the immediate acquisition of confidence in their abilities to help the children remove their deficiencies.

SUMMARY

It is probably true that everyone can improve his reading efficiency. In short, all learners can profit from systematic instruction in reading and study. The nearer the capacity limit is approached, the more difficult it is to bring about a unit of improvement.

Since reading is largely a thinking process, the first step in the improvement of reading efficiency is the re-

direction of the pupil attitudes that condition the thinking. There is accumulating substantial evidence that most of the reading difficulties of the cases referred to the clinic might have been prevented.

Informal testing is an important set of techniques for the class room teacher to acquire because (1) the procedures are personal (2) specific difficulties in reading may be readily detected, (3) the teacher is made aware of the specific difficulties of the child, (4) they are closer to the teacher's actual experiences than standardized tests are, and (5) they are less time-consuming and more fruitful in that remedial instruction may begin with the first attempt at reading.

Critical thinking and reading between

the lines stimulates interest, aids comprehension, and contributes to retention. Judiciously used, games aid in sharpening the child's perception for word forms. Measurement of progress by graphs and the like where the child competes with his own record is an important factor in development of awareness of success.

It appears that a significant number of children are "failed" even though they may be achieving beyond normal expectation for them. Since many of the cases with pre-primer level of reading achievement were struggling with third, fourth, fifth, and sixth grade readers before admission to the clinic, it appears that the principle of beginning instruction with the learner had been violated.

A PLAN FOR A REMEDIAL READING PROGRAM

(Continued from page 148)

Assemble the test sheets which are objective evidence of a child's performance into folders, one for each child.

Make a summary of each child's deficiencies as revealed through the test results and observations.

State the causes as revealed by the tests, observations, questionnaires, and examinations.

State the teaching problems and needs.

State the probable reading interests as revealed through the questionnaire and interview.

Having summarized the analysis of reading difficulty, the probable causes, and the teaching needs, the next task is to provide time for remedial instruction. The method of adjusting such special instruction to the regular school program differed in the various schools represented in the clinic course at De Paul University.

Some schools shortened the periods of the daily program in order to provide an additional period. A few of the schools had remedial reading teachers who spent their time coaching individuals and small groups at a convenient time. This plan is a luxury which very few schools can af-

ford. The more economical plan is that of having the regular room teacher, who knows the pupils' reading difficulties, interests, natures, and traits, do the instruction. Therefore the plan that was recommended as desirable and feasible for all schools was that of providing an enriched program of activities to be given to the children who do not need remedial instruction, while such instruction is given to those who do need it. It was suggested that an enriched program might consist of wide reading—reading which would supplement and enrich a child's knowledge of the various school subjects. Under no circumstances should the children who do not need remedial teaching be neglected or given mere busy work while the retarded ones are coached. The children who are normal in achievement should certainly not be cheated of time devoted to them. Depriving any child of the opportunity to achieve to the extent of his native ability, defeats the purpose of education in a democracy.

(To be continued)

Editorial

Teaching Reading Without Books!

CHILDREN SHOULD be encouraged to do more voluntary pleasurable reading—reading that they will pursue with zest and heartiness. This is particularly true in these years of increasing stress on the technical aspects of reading instruction. Admitting all claims for the scientific choice of reading materials and for the organization of these into an effective curriculum, taught under expert supervision, one must still recognize the need for purely non-technical, informal reading.

Poor readers, and non-readers are becoming more and more conspicuous in the secondary schools and in the colleges. Authorities have reported from twenty to thirty-five per cent of freshmen in mid-west colleges and universities as handicapped readers. These students read very slowly and with surprisingly low comprehension. They fail to grasp the central meaning of a chapter or even of a well organized paragraph and yet take from two to three times as long at the task as do more skillful readers.

When one considers that these poor readers in college are from the upper twelve per cent of the high school graduates, he begins to see the magnitude of this problem and to realize that there is some serious defect somewhere in our schools and institutions of learning handicapping the children and maturing students in their use of books, despite all of the efforts that are being made to teach reading.

With the vast expenditure of thought

upon the solution of reading problems by noted investigators and experimentators, and with the unparalleled zeal and devotion to work on the part of teachers, that is common today, one must go further afield for an explanation of the difficulty than faulty techniques, or inadequate teaching.

No, the blame does not lie here, but rather in one of the most amazing paradoxes in modern education,—the *willingness* to spend huge sums of money in constructing and equipping school buildings, but the *unwillingness* to house in these schools libraries adequately stocked with books, and effectively serviced by well qualified librarians.

Paradoxically, too, the modern school in converting subject matter into experience and into activities has transformed the old fashioned bookish learning into bookless education. We have almost everything in school buildings today excepts books. Children are given a few highly instructionalized books; they are, for example, taught to learn reading in books, but they are given only slight opportunity to *read books*.

School boards will spend four hundred thousand dollars on a school building that is the pride of the community; they will spend thirty-five or forty thousand dollars equipping this building with wood lathes, rip saws, and foundry forges; they will even spend money to hire an architect to design a library room, but they will not spend one thousand dollars on books.

A READING ACTIVITY

(Continued from page 132)

grade; indeed, they had a very liberal selection of books of varying difficulty and kind and read as many as they were able to read, some children handling some thirty to forty books and selecting from them stories they wanted to read,

others content to read only a few.) What this experience did do was to create and foster a love for reading and give everyone a sense of "belonging" in a field of study and pleasure to which our age is the great heir.

(To be continued)

VOCABULARY INSTRUCTION

(Continued from page 145)

	Thorndike	Buckingham Dolch		Thorndike	Buckingham Dolch		Thorndike	Buckingham Dolch		Thorndike	Buckingham Dolch		Thorndike	Buckingham Dolch
V			view	1b	4	wail	4a	2	weight	1b	2	wrench	5a	4
vacation	3b	KU	vigil	7	—	waist	2b	KU	wept	3b	2	wriggle	11	—
vain	2a	2	villain	5a	4	waive	14	—	wicked	2b	3			
value	1b	2	vote	2b	3	waltz	15	3	wisdom	2a	3	Y		
vapor	3a	6	vowel	7	2	wander	2a	2	witty	5b	8	yelp	8	—
variety	3a	2	voyage	3a	3	warn	2b	2	wondrous	4a	7	yowl	—	—
veil	3b	3	vulgar	5b	5	waste	1b	KU	wreath	3a	3	Z		
vein	3a	3	W			wealthy	3b	3	wreck	3a	KU	zeal	3b	7
vex	3a	6	wage	2b	5	weaver	6	—	wreckage	19	8	zone	3a	3

(To be continued)



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